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Report of

The Maryland Agricultural Society---
The Maryland Farm Bureau, Inc.

INCLUDING REPORTS OF THE

Maryland State Horticultural Society,
Maryland Crop Improvement Association,
Maryland State Beekeeper's Association,
Maryland Vegetable Growers' Association,
Maryland Stockmen's Association,
Maryland Tobacco Growers' Association,
Maryland State Poultry Council,
Associated Women of the
Maryland Farm Bureau,
4-H Club Conference.

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REPORT OF THE

MARYLAND AGRICULTURAL SOCIETY

THE MARYLAND FARM BUREAU, Inc.

Including Reports of

The Maryland State Horticultural Society
The Maryland Crop Improvement Association
The Maryland State Beekeepers' Association
The Maryland Vegetable Growers' Association
The Maryland Stockmen's Association
The Maryland Tobacco Growers' Association
Maryland State Poultry Council
Associated Women of the Maryland Farm Bureau 4-H Club Conference

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Volume XXVI, for the year 1941

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BALTIMORE, MD.

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Vol. 26

JUN 2 1943 GIFT

LETTER OF TRANSMITTAL

To His Excellency, Herbert R. O'Conor,
Governor of Maryland.

Sir:

I herewith submit to you, as directed by the Act incorporating the Maryland Agricultural Society, and also the Horticultural Society, this report for the year 1941, which contains a detailed statement of the receipts and expenditures of the Society as approved by the Executive Committee and Advisory Council. It contains the proceedings of the Twenty-sixth Annual Meeting of the Maryland Agricultural Society, Maryland Farm Bureau, Inc., and annual meetings of the Affiliated Associations.

I trust that an inspection of its contents will convince you that the funds appropriated for this purpose have been wisely and judiciously expended.

Respectfully submitted,

CHARLES E. WISE, JR.
Secretary.

February, 1942.
Baltimore, Md.

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REPORT

OF THE

TWENTY-SIXTH ANNUAL MEETING

OF THE

Maryland Agricultural Society
Maryland Farm Bureau, Inc.

January 8, 1942

P. C. TURNER, President, opened the meeting.

MR. TURNER—Will the Convention come to order? I now declare the Twenty-Sixth Annual Meeting of the Maryland Farm Bureau, Inc., in session.

It is my pleasure to introduce the chairman of this morning's meeting, a man who hails from Kent County, President of the Farm Bureau of that great county, a county which for a great many years has had the largest percentage of its farmers members of the Farm Bureau. He is also an outstanding citizen and a good farmer, Mr. H. S. Leaverton.

MR. LEAVERTON—Let us all stand while Reverend Roberts gives the invocation.

Invocation

MR. LEAVERTON—President Turner, ladies and gentlemen: It is indeed a pleasure to see so many farmers and their wives from all parts of the State attending this historic convention. We are meeting in the midst of a conflict that warrants all our efforts to produce food for this Nation and its Allies. I will not attempt to say more, because our first speaker is a man in whom we all have confidence and who is very capable of bringing to you the activities of farm organizations. He has been our president for the past three years, and he has done a splendid job as leader of the Maryland Farm Bureau. It is my pleasure to present Mr. P. C. Turner, President of the Maryland Farm Bureau.

PRESIDENT'S ANNUAL ADDRESS

As we meet here today our nation, in fact the world, faces the greatest crises in history. On Sunday, December 7, sixty men and women representing all of the 23 counties of Maryland arrived in Chicago to attend the 23rd annual convention of the American Farm Bureau Federation. On that historic day the news was flashed to our nation that the barbarous Japanese had made a treacherous and dastardly attack on our outpost in the pacific Islands at Pearl Harbor and Manila, killing about 3,000 and causing great damage to our naval and air forces. At the first session of that convention, the following resolution was passed amid the deafening cheers of the sons and daughters of the soil from all over the country—"Franklin D. Roosevelt, President of the United States and Commander-in-Chief of our Armed Forces: The men, women and youth on America's farms herewith assure you of their full response to your call to arms. We here and now pledge to you the fullest measure of our support. We dedicate ourselves and that which we possess to the righteous cause of a united people. We, as one, with God's help, will march with you against the common foe." The American Farm Bureau Federation, Edward A. O'Neal, President.

The reaction of our farm people is but an illustration of the reaction of the whole American citizenry who in a moment were galvanized from a people with divergent views on foreign and domestic affairs into a people more united than at any time in our history, with but one thought and one aim, the destruction of all the dictators and the preservation of democracy and christianity on the earth.

We meet here today for our annual Maryland convention in the shadow of Fort McHenry, where in another war Francis Scott Key was inspired to write the Star Spangled Banner, our national anthem. As we meet today, history is being written. Our boys of the Navy, Army, and Air Corps are in a battle to the death with the powers of evil that are bent on destroying that which is most dear to us, our way of life and our very freedom.

This convention must write a program, must pledge to do more than our part as farmers for this country of ours. In so doing, history will but repeat itself, in that in all times of crises, dating from their signing the Declaration of Independence and the Bill of Rights, down to the present, men and women of the soil have done their part.

Food for Defense

It has been said that food will win the war and write the peace that follows. Your government has asked that we increase the production of nearly every food crop produced in Maryland. Local county committeemen of the triple A have contacted every farmer in the nation who have almost unanimously signed an agreement to assist in putting over this job. We will do it, even though faced with perplexing difficulties.

Labor

The most serious problem is that of obtaining labor to grow, harvest and process our crops. We, in Maryland, live in a congested area of defense industry which is syphoning labor from the farms at an alarming rate. With the ever-increasing demands for men for our fighting forces more and more of our farm help will be taken by the draft. We want to go on record in stating that Colonel Henry C. Stanwood and Major Paul Klaesius in charge of the Maryland Draft, and the Draft Boards in the counties have shown their recognition of the fact that in time of war the production of food is just as important as the production of ships, tanks, planes and fighting men.

Price Fixing

We farmers fear inflation with the deflation that is sure to follow because in the past we have been the chief sufferers. As this is being written the so-called price control bill has passed the House and has just been reported in the Senate by the Banking and Currency committee of the Senate. Mr. Ed. O'Neal, our able national president, backed by all farmers and with the approval of thinking people generally (including the editorial staff of the Baltimore Sun) made a valiant fight before the committee to include ceilings on wages of labor, just as ceilings are put on farm products and industrial goods. This fight is continuing on the floor of the Senate. We believe legislation that does not do this is doomed to fail in its objectives.

President O'Neal says this price fixing legislation, while necessary, is fraught with more danger to American Agriculture's welfare than any measure since he has been in public life. May God grant that this great leader be spared to us, that he may fight our battles through these troubled years.

Labor claims that control of wages would be an invasion of human rights and would mean regimentation. Just why should labor be shown special consideration over other classes in this country where we preach "Equality for all with special privilege to none"?

The farmer's wage is the price he gets for his product. The soldier at $21.00 a month is regimented. All classes including labor should and must be regimented for the duration of the war, whether we like it or not, in the interest of national defense.

Parity

Mr. O'Neal secured a restoration in committee of a ceiling on farm prices at 110% of parity, which, with a floor of 85% established by the Stegall Bill, would only produce an average price of 100% of parity on farm products. We believe the Secretary of Agriculture who is responsible for the increased production of food products needed for de-

fense should set food prices or have a veto power on prices set by Mr. Henderson or anyone else. The Bankhead amendment to do this is now being fought for on the floor of the Senate.

The foregoing is a statement of need for fair treatment by Congress, but if we do not get these requests we are not going to sulk or strike in this hour of peril to our country. We feel that Congress should enact legislation such as the Smith Bill, prohibiting strikes in war industries.

Taxes

I am leaving state issues largely to Mr. Wise who has grown in stature year by year as our legislative agent at Annapolis. We must ever be on guard to see that taxation, both state and national, is applied on the principle of ability to pay, which means retention of income tax and the removal of the entire state real estate levy.

The Future

The Maryland Farm Bureau has many affiliated groups representing every crop or product produced on Maryland farms. In addition, auto, life, and fire insurance co-ops. Farm purchasing co-ops, milk marketing co-ops, tobacco growers, wool pool, stockmen, poultry, fruits, vegetables, horse breeders, etc.

We have the great University of Maryland, its officers, its Department heads and the best Extension force in the world, both men and women.

We have the Associated Women of the Farm Bureau with their fine leaders. We have Roy Brookes and the Maryland Grange. It has been our objective to bring all these agencies serving agriculture closer and closer together, and closer to the Farm Bureau.

Ed. Wise Secretary, Roy Weagly Vice-President, Wilbur Smith and Martin L. Sutton fieldmen, Miss Dressel and Miss Myers in the state office, together make a great team. We have fine officers and membership in each of the 23 counties. We have Harry Nuttle and Mrs. Roy Weagly as our spokesmen with the national organization.

During the national emergency, the problems presented to us will challenge the leadership of all groups and individuals dealing with agriculture. Let us all resolve that we will produce this food for freedom and that we will do our bit in civilian defense on our home front.

With such leadership and with confidence we face the war and its aftermath with heads up, knowing that every cloud has a silver lining and that God in his mercy will listen to the prayers of our nation and other nations that are fighting against the powers of evil and for the restoration of liberty and Christianity in the world. I thank you.

MR. LEAVERTON: Thank you, Mr. Turner, I am sure we all agree that was a fine address.

The next speaker has directed the executive affairs of the Maryland Farm Bureau for more than eight years. During his term as Secretary, the membership has more than doubled. Our position in the legislative halls in Annapolis is one that is recognized by the administration and its leaders all over the State. This has been largely due to the work of Mr. C. E. Wise, Jr. Mr. Wise will present to you, at this time, his annual report.

SECRETARY'S ANNUAL REPORT FOR 1941

C. E. WISE, JR., Secretary-Treasurer

The past year has been one of progress for the Maryland Farm Bureau in strengthening the position of agriculture in the state. All farmers can thank the 5,518 Farm Bureau members for their help in improving the business of farming. Because of this work our industry is prepared to meet the war demands for production increases. All units of a vigorous farm organization stand ready to carry on as citizens, as farmers, and as Farm Bureau members. Yet, even more recruits are needed to man the outposts of organized agriculture in every community of Maryland. During the coming year we must consolidate the gains made and go forward to new objectives in spite of increasing handicaps.

In 1941, we cleared many obstacles from the path of agriculture. At the General Assembly a strong legislative program was sponsored and enacted. The R.E.A. bill, a cooperative law to protect and help the development of rural electrification was enacted. A state drainage law, a pure seed law were passed. The Board of Regents of the University or Maryland, which is the State Board of Agriculture, was enlarged by the addition of two members to be nominated by the Grange and Farm Bureau. Two bills on prison labor were passed. One provides for an increase in the funds for road construction and the other permits the sale of goods and commodities used in agricultural production. The fresh egg law was saved. Funds were secured for continuation of the fight against Bang's Disease, and the Japanese beetle. Insufficient funds were budgeted to the University of Maryland, but partial restoration of the county agents' salaries was accomplished.

An attempt to enact a state labor relations act and a state wages and hours law by labor was opposed and defeated. Two measures that passed both houses were vetoed. One of these made it a misdemeanor to maliciously interfere in the production or distribution of perishable food products and the other permitted farmers to use old trucks on or near their farm without a license. The income tax was amended and a law passed to apply part of the state surplus to reducing the real estate levy. The Board of Public Works has already done this and reduced the state levy by 8¢ for '42 and '43. One of our major goals, the elimination of the state real estate levy, is within sight.

In October, a move was started to convene the General Assembly for the purpose of reducing the income tax. Your tax committee studied the problem and opposed a special session to save the state money, to give the revenue system adopted last spring a thorough trial before any change, and to build a reserve for possible war emergencies.

Recently, the Federal government requested the states and local units to reduce costs and lower taxes in order to leave more for it to tax. This, however, should not change our stand against a special session of the General Assembly.

Many of the legislative questions were discussed by our 90 planning groups and much help was secured from them. These groups continue to be our outstanding project. They are developing group hospitalization in the 8 counties under the plan. Another Seed Cleaner, two Frozen Food Locker Plants and many other worthwhile aids have been started by this activity.

It has seemed to us that in the past, annual meetings have had too little time allotted real Farm Bureau work. This year the speaking program has been cut down and the place filled with reports of some of our active committees. I will not discuss these but leave that to the chairmen of the respective committees; one exception is the labor committee which is not listed.

President Turner has been chairman of this state committee on farm labor which has helped secure deferment for some 2,000 farm boys. He has secured the cooperation of all agencies and this work has been a distinct accomplishment in easing the farm labor situation. This is an example of the fine work he has done throughout the year.

The Consumers Cooperative committee has been active and its chairman G. Wm. Sattler will report later on the accomplishments. F. Ridgely Todd, chairman of the Baltimore Market committee, will tell what this group has been doing to improve the marketing of produce.

Martin L. Sutton, assistant secretary of the Farm Bureau Cooperative Services, will report on the auditing and management service started this year and give the results of the 1941 wool pool.

Wilbert Smith, secretary of the Program and Membership committee, will present its recommendations for your approval.

The tax committee report will be presented by Paul Walker and time has been allowed for a discussion.

A Northeast Farm Bureau Training School was held at Jackson's Mill, West Va. in September. Over 30 members from Maryland attended the four-day session.

A special car took some 61 representatives to the American Farm Bureau Federation convention in Chicago. Wilbert Smith addressed the

general meeting on Membership. A Maryland sales team made up of Wilbert Smith, Martin Sutton and Richard Blackburn won the regional contest and placed second in the national.

Our leaders feel that the funds spent in sending delegates to the national convention are well invested. We will have some other investments to make with the increase in assets for 1941 which amounted to $10,710.00 for a total of $40,319.00 assets at the year end. This money should be used in the purchase of defense bonds (to help win the war).

The war and the rationing of tires, autos and other products bring home the emergency. It makes one realize that changes are taking place that will affect our lives and our business.

We in the state office realize that 1942 will require a different plan of membership enrollment to save time and travel. This will be outlined to you to enlist your support and that of every member. If we all work together the handicaps of short labor, restricted travel and an election year can be overcome and our goal of 6,000 members reached.

We are in a war economy. It is the second time in a generation that American farmers have been called upon to feed our nation and its allies. Maryland farmers face a more difficult task than those in many other areas. Labor is scarcer and we cannot use much of the labor-saving equipment common in the midwest.

We must do everything we can to help ourselves, help agriculture to help our country. One way we can help ourselves is to increase the discussion program. Through it the members inform themselves and become better able to help agriculture. There is another way that these meetings assist, if they have a good recreation period. Through recreation we learn to play and this is needed more now than ever. It is a good thing for everyone to relax and have a good time. If the planning groups do this, all will be more cheerful. This is what is called building morale.

In a series of discussion group meetings the question "What is Your Most Important Need" was asked. The answer was "More Information or Education". Our Extension Service and the Experiment Station are the source of this. The first job we have in 1942 is to insure ample funds and support for this work.

There is a tendency in Washington to create a new field force and appoint committees for every project that is created. The Extension Service was started to meet the emergency in 1917. It has guided agriculture and its organizations to where we are today, prepared for the job ahead. It is only common sense that those trained for 25 years should be the key to all defense activities in agriculture to save money and promote efficiency.

Our Farm Bureaus in the state and county can assist by joining in defense work projects through their officers, directors and other leaders. This will dovetail our organization into defense activity without creating new committees. It will save time, money and be more effective.

The resolutions each year are the program the delegates adopt for the organization leaders to work out. In normal times conditions are stable and the future is fairly certain. At present everything is uncertain and one cannot foresee the needs of tomorrow. Many questions will necessarily have to be referred to the directors and officers for action at the proper time.

Production has been an easier problem than marketing and will continue to be. There will be many forced changes in the distribution of farm products, since trucks are curtailed. Vegetables, fruits, livestock will move more by rail. Even milk delivery will be changed with the possibility of horses coming back on the city streets. Farmers may have to go back to the horse and buggy days and actually live at home.

Grain storage facilities proved inadequate last year. Many Maryland farmers were unable to market their wheat as the elevators were filled with western grain. These men were not able to take advantage of the government loan program. Arrangements should be made to reserve sufficient storage in Maryland elevators to handle the wheat produced and normally marketed here. We must develop better marketing facilities and continue to sponsor cooperatives.

A special session of the General Assembly may become necessary. If and when this is held your officers will be there seeking to help agriculture hold the gains made and to secure other needed legislation.

In national legislation your officers will work with President O'Neal. Recently, President Turner has been called to assist with the anti-strike bill and the price control amendments aimed to include wages. This is one of the most far-reaching acts ever considered by the Congress. If farm prices are controlled, crop production limited and wages allowed to go unchecked, farmers will be in a virtual straight jacket. Another vital problem is how to coordinate all agricultural activities and prevent centralization in Washington. Our part in this can be furthered by insisting that a state agency, the Extension Service, be used to direct all agricultural activities in the state and counties.

There is a tendency to praise agriculture but to forget it when important appointments and decisions are made. We must have the tools and supplies with which to work. The need for machinery and repairs has been recognized and a program of overhauling farm equipment is under way. This was accomplished by our leaders insisting on its importance. Some parts were overlooked and these must be called to the attention of the authorities. One small item apparently forgotten are the clipper blades used in shearing sheep and clipping cows. As early as last spring this work was slowed by a shortage of blades. German lack of wool is helping Russia defeat the Nazis.

Burlap bags, fertilizer, spray material are going to be hard to get and high in price. Tires and cars are being rationed. In the first list of eligibles for tires farm equipment was included but farm trucks and

cars were not. The farm truck is an indispensable piece of farm equipment and every effort must be made to have them so classified. Other items will be rationed and our leaders must be ever on the alert to see that agriculture is properly recognized.

This is no time to simply read and agree with every program handed down. There is need for constructive criticism and helpful suggestions. If we take this attitude we will be able to give the best advice and most help to the national program.

Agriculture shall not be caught napping, as our armed forces were at Pearl Harbor. The supply of basic crops is ahead now and it must stay ahead. An error of estimate or plan that results in loss of potential production means a year's delay in replacement. It is far better to have a surplus than a shortage.

Each day the war continues, increases the consumption and decreases the production of food in the nations involved. Food is necessary to win the war. To make sure of this our current plans and programs should be studied to meet the needs for several years. At present, farm labor is available and our equipment is in fair condition. Over a period of years a decrease in efficiency of these factors plus the shortage of fertilizer will tend to curtail production. Crops best adapted to food and feed production should be encouraged. In my opinion, we should start with corn and do away with allotments in this region.

Our farmers must be allowed to produce to the full extent of their farms and their present facilities if they are to meet the increased costs with the sale of products whose price is controlled.

Last year Dr. Corbett advised farmers to increase production without enlarging the farm plant and to reduce their debts. This is still good advice to follow. The use of more lime, coupled with more legumes and livestock, will help offset the decreased supply of fertilizer. The supply of lime is limited only by labor.

Prison labor could easily be made available for lime production and we should do everything possible to accomplish this. We could well adopt the slogan "Lime-Legumes and Livestock" for increased production.

Our efforts in the past have built a program that is the foundation for our war effort. Maryland farmers are well organized. We have a task to perform in 1942 for ourselves and for our nation. We will go forward confident of victory on the war front, victory on the farm front, and victory in the peace..

MR. LEAVERTON: Thank you, Mr. Wise. That was a fine address. Now, we are going to have a few songs, and I am going to ask Mr. Wise to introduce the song leader.

MR. WISE: I told you last night about our meeting in West Virginia. Miss Farwell led us in recreation there. I also mentioned the ball game, and told you we had some outside help. We had the song leader cooperating with us in winning the ball game, and so we thought we would bring them down here to cooperate in carrying on this Convention. Mr. Charlie Taylor, of West Virginia, will now lead the singing, aided by Miss Farwell.

MR. LEAVERTON: Thank you, Mr. Taylor. We are now going to hear reports from several of our auxiliary groups. The first report will be on "Insurance" and will be given by a man who has led the insurance forces in Maryland for five years to an all-time high in production. I present Mr. Zach Turner, Jr., State agent of Farm Bureau Insurance Companies.

FARM BUREAU INSURANCE

ZACH TURNER, State Agent

I come to you this morning in the most critical time in the history of our country, reporting the finest record to our sponsoring organization.

While dark clouds of war hover over us, let's not be afraid. We have the tools within our hands to shape a destiny of peace and abundance for all. Those tools are the teachings of our Savior whose birth nearly two thousand years ago was the greatest event in the history of mankind.

The very foundation of cooperative insurance and the whole cooperative movement are his teachings. We, as cooperators, should pledge ourselves to carry forward throughout the new year the spirit of brotherhood and mutual helpfulness. That is the true spirit of 1942.

On behalf of the Farm Bureau Insurance Companies, the Maryland State Office force, and in the true cooperative spirit, it is our ardent wish that 1942 will bring to you and each member of your family, Happiness, Contentment and abundant Health and success for the New Year.

I know that every agent and every cooperator and cooperative are proud of the record of the Farm Bureau Insurance Companies, because these Insurance Companies are one cooperative service that has made an outstanding record not because of any one individual but because of the teamwork of everyone connected with Farm Bureau Mutual Auto Ins., Farm Bureau Mutual Fire Ins. Co. and Farm Bureau Life Ins. Co.

The primary purpose of the nation-wide Co-op drive is to announce to Americans the fact they are consumers and should organize themselves into Consumers Cooperatives. The specific things everyone should do are these: Join Co-ops; Buy in Co-ops; Invest in Co-ops.

Let's stop for a moment and see what has taken place in our development. On April 14, 1926, in Columbus, Ohio, the first policy was insured by the Farm Bureau Mutual Auto Ins. Co., incorporated just four months before by a handful of farmers. In the beginning, insurance was offered only to farmers—at rates averaging 40% below rates prevailing at that time.

In 1931, residents of small towns and villages were asked to join with farmers in providing protection for themselves.

In 1934, to build towards a program of complete cooperative insurance services, the Farm Bureau Mutual Fire Ins. Co. was incorporated.

During 1935, people in the big cities were invited to join the growing records of Farm Bureau policyholders.

To provide life protection, as well as auto and fire insurance protection, the controlling interest in a life insurance company was purchased by the Auto Ins. Co. With the addition of the Farm Bureau Life Insurance Co., complete cooperative auto, fire and life insurance protection became available to cooperators.

Farm residence and business liability protection was added to the growing list of casualty insurance services in 1939.

Farm Bureau policies are now available in 9 states and the District of Columbia. Cooperative users—owners have over 397,874 policies in the Farm Bureau Insurance Companies with assets over $12,000,000.00. Insurance in force, reserves and services are all larger than ever before and are expanding rapidly.

When we think of auto insurance and General Liability insurance, we sometimes think why is such a coverage necessary. What is legal liability? Common law imposes on everyone the responsibility of proper care for the safety of the public. The failure to do what a reasonable person would ordinarily have done under the circumstances is generally known as "negligence" which is the basis of any legal liability claim for damages. Just what constitutes negligence in any particular set of circumstances is a question of fact to be determined by a jury. These are the reasons why we carry auto and general liability insurance.

Life Insurance has been defined as a contract whereby for a specified payment, called the premium, the insurance company, called the insurer, agrees to pay an individual, called the insured, or a beneficiary, a fixed sum upon the happening of death or some other specified event. I hope you can see the difference in services which we are offering to the public.

During 1941, the total production on life in the Tri-State Territory is $2,376,040.00; Maryland, $1,599,022.00—60% increase over 1940; Delaware, $443,101 with 160% increase over 1940; D. C., $333,917 with 190% increase over the past year. In 1941 Auto coverage totaled

20,940. In Maryland an 88% increase, 50% increase in Delaware and 100% increase in D. C.; $10,445.00 premium in General Liability; 1,048 Travel Accidents and 2,549 medical payment endorsements.

The next figures are approximately in force in the Tri-State territory.

States	Life	Auto	G.L.	T.A.	M.P.E.
Maryland	$4,000,000.00	58,068	$7,623.00	3,755	1,939
Delaware	618,000.00	10,777	1,357.00	650	478
D. C.	285,000.00	4,448	1,465.00	100	132

We in the sales force are proud of the above record and do appreciate the help and cooperation received from the Maryland Farm Bureau and its county organizations. In the District of Columbia, it is the District of Columbia Cooperative League and they have cooperated to the fullest extent. In Delaware, we do not have a sponsoring organization.

Insurance results in 1942 will be just as good as our trend of thoughts. The cooperative movement will not advance any further than our thoughts and ideals; that's the reason we play such an important part in the development of cooperatives. So, therefore, 1942 results will be outstanding both from cooperative development, also insurance sales, because our representatives are interested in developing the whole cooperative program.

The services that now are available to you and your friends are as follows: Life Insurance—There are several different contracts such as whole life policies, endowments, term contracts and various juvenile contracts; also, Group insurance, Health and Accident insurance and Group Hospitalization and Surgical Benefits coverage.

Auto coverage—fire, theft, collision, liability and property damage coverage, travel accident, medical payment endorsement. General Liability insurance covers garages, farms, private dwelling, boats and what not. Other services are to follow.

Again, I want to thank each and everyone who helped to build our Insurance Companies. When you insure cooperatively, you join hands with thousands of other cooperators who are providing adequate insurance protection at an economical cost.

By changing the aims of business to service and changing the ownership of business to users, cooperative insurance protection provides democratic ownership and participation for policy-holders in their own insurance companies.

The Farm Bureau Insurance Companies are part of the nation-wide cooperative movement to provide an economic system that works for the consumers interest and welfare.

Since we last celebrated this Annual Meeting, changing events have reshaped the lives of men in ways undreamed of before. Friends have become enemies; sorrow has knocked at the doors of multitudes of people; empires have crumbled; things held dear and sacred have been trampled in the dust; ideals have been strained to the breaking point.

Confusion has set upon us no end, and we reach out toward an uncertain future and wonder—wonder if there is anything permanent to which we can anchor and have the assurance of our anchor holding.

Let your mind leaf through the pages of history and you will discover this sweeping current of changing events is nothing new. It has ever been thus.

Wars, rumors of war, the clash and din of battle, the constant struggle of nation against nation, all of which has brought—change.

But, no matter how dark the days, no matter how confusion has run rampant over our world, no matter how hopeless the cause of right and justice seems to have been, through and above it all each year at this season rings a message man cannot change, the changeless song of the angels—"Peace on Earth, Good Will Toward Men."

Cooperation is built on that unchanging foundation—Peace, Good Will—a foundation that time and man in all his ruthlessness have not been able to change. As cooperators, let us at this time appreciate more than ever the task that is ours—to build and build well on the changeless foundation of peace and good will. If that be our goal, we, too, can lift our voices with the heavenly host and be unto mankind a changeless guiding star through the changing days ahead.

MR. LEAVERTON: The next report will be on "Cooperative" activities in Maryland, which will be given by Mr. Martin L. Sutton, who is doing a splendid job as field man for the Maryland Farm Bureau.

REPORT ON COOPERATIVES

MARTIN L. SUTTON

I will endeavor to bring to you in the next few minutes the activities resulting from the cooperative effort of farmers in Maryland. This effort is extremely important at this critical time and will probably be more important in the period after the war, if we win, and we *must* and *will*, if every individual in the nation will use his intelligence, skill, labor and initiative to crush from the face of the earth those who seek to control the economic, social, and religious lives of peace-loving and free peoples.

Cooperatives in Maryland have been the source of supplying farmers with quality merchandise at fair prices and marketing products at higher levels than would be enjoyed had they not existed. Time will not permit a review of the activities of all these cooperatives, but I want to make the statement that there is not a farmer in Maryland who cannot enjoy the services of cooperatives, in some way or other, if he has the desire to. Cooperatives of various types and kinds dot our State to the

extent that they are in the reach of all farmers. Agriculture, as a whole, must get into the frame of mind and be desirous of using these services in order to protect its economic welfare. They are farmers' institutions, owned, controlled, and operated, and might I say, successfully operated, by farmers.

The Maryland Farm Bureau Wool Pool served over 500 farmers in Maryland and a small area in Pennsylvania during 1941. This pool marketed over 64,000 pounds of wool for farmers at a price that averaged at least 5¢ per pound, *more* than the prices paid by local distributors at the time the pool was marketed. I want to ask you folks to urge your neighbors to use this marketing agency. The Wool Pool is a non-profit cooperative and handled the 1941 clip on a little over 1 cent per pound, increasing our bank balance just $99.23. It is self-sustaining in its operation.

Marketing of truck crops and vegetables cooperatively through cooperative Auction Blocks in Somerset and Wicomico Counties has increased in volume during the past year. These blocks are offering farmers the opportunity of placing their produce on the competitive market to be sold at a price that market will justify. It has been said that competition is the life of trade and how important it is for farmers to see that their produce is competitively sought. These blocks have a tendency to break up monopolistic control of produce by purchasers who control certain markets and prevent outside competition from coming in.

Seed cleaning and treating must be mentioned because farmers in Harford and Carroll counties have seen the advantages of this cooperative service. Seed cleaning and treating on a commercial scale have been done in other parts of our state, but the cooperative enterprises have saved farmers money and those who participate own the equipment. This is not only a service, but it develops ownership.

The past year has been one of wide development in the cooperative distribution of Petroleum Products. Farm Bureau and other local cooperatives, together with Southern States Cooperative, have developed this field and are servicing farmers in most of the State.

Realizing the need for an auditing service, the Eastern Shore Cooperatives developed it in 1941. Monthly statements of their activities are given to each director and the semi-annual audits break down the business on a commodity basis, which gives the directors a better opportunity of scrutinizing the business and adjusting procedures and fixing policies. This service was used by 5 cooperatives in 1941.

A number of our purchasing cooperatives in the state have not been large enough to efficiently manufacture their supplies and have used Southern States Cooperative as a source of supply. Southern States, with its large mills, quantity purchasing and efficient operation has

helped a lot of our smaller cooperatives. This cooperation should continue and I am sure it will.

We are proud in having two of our Farm Bureau Leaders on the Southern States Board of Directors. Mr. H. H. Nuttle was re-elected in October of last year for a three-year term and was chosen Vice-President. Mr. P. C. Turner, our President, was elected to the directorship from an area comprising several of the Western and Southern Maryland counties. These men, with the ability they have displayed in farm organization for a number of years, are certainly an asset to both Southern States and the Farm Bureau.

Maryland farmers enjoy the benefits of cooperative marketing of milk, as three of our largest cooperative institutions are working out distribution problems with distributors and consumers in Baltimore, Washington, and Philadelphia.

Tobacco growers for a long while have had the advantage of their marketing cooperative which has not only raised the price to its farmer members but has been used as a yardstick by which all farmers receive better prices.

Frozen Food Lockers are coming into prominence as a result of cooperation. More of these should be developed in the next few years.

I have previously said that our farm cooperatives are farmer owned, controlled and operated. Their success depends a lot on the extent to which farmers use them. However, this report would not be complete without paying tribute and giving thanks to the management and employees of these institutions. We must ever realize that those men are working day and night for you and me. Their job is to see that these cooperatives operate to the advantage of all concerned. To that end, I know that they are doing their level best.

In conclusion, I want to say that it is up to you and me and others like us to prove that our economic, social, and religious problem can be solved by cooperation, in its various phases, rather than by federalism or by dictatorship—which would ultimately bring revolt and terror.

God grant us peace and the continued right of free enterprise after we have won this war against the outlaws of humanity.

MR LEAVERTON: The success of any organization depends on two things,—either the women's ability to do the job, or the women's ability to get the men to do the job. We are fortunate in Maryland in having such capable women. At this time, we will hear from Mrs. Edwin D. Fry, President of the Associated Women of the Maryland Farm Bureau.

ACTIVITIES OF ASSOCIATED WOMEN

MRS. EDWIN D. FRY, President

It is with pleasure and some pride that I give you an accounting, or measure of growth, of the activities of the Associated Women of the Maryland Farm Bureau during 1941.

We have taken our job seriously, that of helping "to promote, to protect and represent the business, economical, social and educational interests of farm families in Maryland" and appreciate the interest, wise counsel and encouragement that Mr. Turner, our able president, Mr. Wise, and members of the organization have constantly given us. To Miss Kellar, Dr. Corbett, Mrs. Provenson and other members of the faculty and Extension Service of the University of Maryland, also to Miss Mary Ott, of Hood College, we wish to express appreciation for their cooperation in many ways.

Associated Women have shown a steady, healthy growth in members, organization activities and ever-widening field of interests in the year of 1941.

Beginning with a $25.00 contribution to the American Seeds for British Soil Committee at the time of our last annual meeting, money was then sent by individuals and groups in many counties direct to committee headquarters in New York and helped to make the American total of 17 tons of seeds and 50 tons of fertilizer distributed to 6,000 units of women's institutes throughout Great Britain.

There was much interest in last year's topic for the Public Speaking Contest, "Education in the Home for Civic Responsibility", and women in four counties prepared for competition. Home responsibilities were, perhaps, greater than in the previous year and on October 27 in Baltimore, there were two speakers. Mrs. Henry Watson of Kent County was declared the winner of the state contest and Maryland representative in the regional contest held November 24 in Syracuse, New York. Mrs. Willis Cissel of Howard County was named alternate.

We have many capable women in Maryland and this year's topic is one that we should all be giving thought to these days, "The World We Want After the War." Peace will come again, for we still have religion, faith in God's plan and courage to win the all war, which threatens our freedom. Let us all discuss this topic in our planning group meetings and encourage women in our own counties to use their talents by entering the state contest in 1942.

Mrs. Roy Weagly was re-elected as National Vice-President at the recent 7th Annual Convention of the Associated Women in Chicago. She is serving as Washington County Chairman in the Women's Division of the Maryland Council of Defense. Mrs. Roy Weagly, Mrs. Vestus Wilcox of Montgomery County, and Mrs. Atlee Armour of Cecil County attended the annual meeting and banquet of the National Maternal and Child Health Council in Washington. All brought back much of information and interest to our group. Back of the growth of services, of the marked improvement of national and child health of the past few years, stands a democratic achievement in the education, through numerous groups, of thousands of women. Action which follows such growth of understanding is evidenced through many channels

—membership on planning and advisory committees, volunteer service, support of or opposition to legislation, increased ability to meet and solve problems within our own home circles.

In a legislative way, we have been active and outspoken in our own state in our efforts to defeat the proposed amendment to the fresh egg law and the conservation bill, relative to the forestry service. We were represented in the group appearing before Governor O'Conor in behalf of an increased budget for the University of Maryland, with particular reference to increased funds for extension work, by Mrs. Algernon Carter of Queen Anne County and myself.

Our vice-president, Mrs. Clarence Kern of Caroline County was chosen by our Board of directors to represent the Associated Women at the Rural Women's Short Course at the University of Maryland in June.

Mrs. Minier Hostettler, director of district No. 2, was one of the speakers at the Howard County banquet. Five out-of-state trips for 4-H club girls were made available last year as a result of the approval and incorporation of the resolutions of the Associated Women with those of Farm Bureau. Your president represented the Associated Women in August at the 4-H club week campfire banquet and assembly and at that time addressed the group; addressed the Junior Class of Home Economics students at the University of Maryland on Home Management and outside activities, served as a judge in connection with selection of the Queen of Timonium Fair and of the Home Economics exhibits in F.F.A. and Community Fair; have attended all but one meeting of the Farm Bureau directors and Executive Committee meetings during the year; three northeastern regional conferences of presidents and secretaries and the national conventions of Associated Women and A.F.B.F.; visited nine counties during the past year, attended eight annual banquet meetings, three picnics, five county meetings of Associated Women, three consumer cooperative committee meetings, represented the Associated Women on the Advisory Council of Women's Division of Maryland Council of Defense; attended numerous meetings on Defense Housing, nutrition and health; served as chairman of sub-committee on Defense Garden Contests; spoke over radio W.F.B.R. in the interest of Garden Slogan and Poster Contests, in all, totaling fifty-eight days of field work.

There are now 12 counties with organized Associated Women; or six unorganized counties but fairly active cooperation of women; five with chairmen and comparatively inactive. Eleven organized counties report membership drives. Mrs. Wm. Parker of Wicomico County solicited 122 new members this year—led the state. Ten organized counties report organization of new planning groups; five organized counties aided or sponsored Garden, Slogan, Poster, Refrigerator Locker, Baking and Well Baby contests. There will, no doubt, be victory garden contests this year for many reasons, some of which are food for freedom, in-

creased food production agreements, better health gained through exercise needed to achieve a productive garden, and greater supply of fresh vegetables for immediate use and for canning and storing. Proper canning and storing saves tin needed by commercial canners, such a food supply saves cost and lessens difficulties of transportation and distribution; furthermore, it releases more of the commercial products for our armed forces and for necessary shipments abroad in our battle for victory. Nearly every county has reported cooperation with other groups in defense work, varying from Red Cross, instructing and learning of First Aid, Home Nursing, conservation of material needed for industrial production—sale of Defense Stamps and service as airplane spotters and air raid wardens in several counties.

The call upon farm families to produce food and fiber under increasing difficulties and the call to serious thinking is as great as the call to arms, *but* we must still find time for fun and more community singing to ease the strain of the trying days ahead. "Music washes away from the soul the dust of everyday life". We can and will do what is necessary to win this war as quickly as possible and keep the home fires burning if we will, in the words of Edward Everett Hale—

"Look up! and not down;
Out! and not in;
Forward! and not back;
And lend a hand."

MR. LEAVERTON: There were several committees set up by the Maryland Farm Bureau that have been very active during the past year. This meeting would not be complete without having reports from the Chairmen of these Committees. The first one that will report will be the Baltimore Market Committee. Mr. F. Ridgely Todd, of Baltimore County, will make that report.

MR. TODD: This is the first time this Committee has reported to the general assembly of the Farm Bureau, and I do not know whether this report will convince you that its activities during the past year have been sufficient to justify its existence, but possibly it will awaken us to further activity. At least, we have tried to do one or two things this year. In our program our purpose was to aid in more efficient movement of fruits and vegetables through our markets. The approach to this program is two-fold. Both are tremendous undertakings and have far-reaching ramifications.

The long-time approach has to do with physical facilities. In the last fifty years, the only noticeable change has been from horse and wagon to motor trucks. Last year we had a marketing truck Act drawn up to present to the Legislature, but after meetings with the trade, it was decided to withdraw that Act, but we talked a lot about it, and decided some action should be taken. We realized that, and so that activity served its purpose in stirring the trade to action, making them study

their facilities to ascertain what changes are needed, and the means of accomplishing those changes. We had joint meetings of this Committee and the trade to consider re-location of certain market facilities. We succeeded in getting Grade and Package Committees of the trade organized and working to study and work out plans in the future to make the necessary changes in our facilities.

The second feature of this program as an immediate action program, which has a somewhat new approach to the handling of fruit and vegetables, as they go into our markets. First, we suggested the appointment of a marketing specialist to serve as a coordinator to work with the producers, the wholesale and the retail trade and the chains, along with the new set-up of the army purchasing program, through which a fair share of Maryland fruit and vegetables flowed this past year. The duties of this specialist, or coordinator, can best be explained by a program of work recently adopted in line with regional set-ups on the same basis.

MR. LEAVERTON: Thank you, Mr. Todd. Next we have the report on Consumers' Cooperative Committee, by Mr. G. William Sattler:

CONSUMER COOPERATIVE COMMITTEE REPORT

G. WILLIAM SATTLER

I have five minutes, enough time to report on the activities of our committee, but not enough to tell you why the Consumer Cooperative Movement should be sponsored with more vigor in 1942.

We, as farmers, are familiar with cooperative buying of feed, fertilizer, insurance and more recently, petroleum products. We are but one quarter of the population—however, we have a common need with all, that is, we all consume food.

The Consumer Cooperative Movement is concerned with buying human food cooperatively. From 250 to 300 stores and buying clubs, located in the East from Boston to Washington, are buying their supplies through the Eastern Wholesale Cooperative in Brooklyn, N.Y. The Eastern Wholesale Cooperative did about $2,000,000 worth of business last year.

There are three Consumer Cooperative stores in Maryland. One is in Greenbelt—one in Westminster, and one in Baltimore. Our committee decided to meet with the Baltimore and Westminster groups and we did. The Baltimore group requested aid in educational funds, and a small sum was granted.

We met with both the Westminster group and the Board of Directors of the Carroll County Farm Bureau. We tried to explain to the Farm Bureau Directors what the Consumer Cooperative Movement was and urged their support of this local store. From reports, we must have accomplished our purpose.

The committee decided that four people should be sent to the annual meetings of the Eastern Cooperative Wholesale. This was done. The committee also decided to send someone to the Eastern Cooperative Wholesale training school at Amherst, Mass. I was the one selected and my report was published in the Maryland Farm Bureau News Letter.

The committee suggested the advisability of sending someone to the Eastern Cooperative Wholesale recreational school. I presented this idea to the Baltimore County Directors with the results that one young man and one young woman were sent to West Park, N. Y. They have attempted to bring Cooperative Recreation to the Baltimore County farmers at our local meetings and in December they were invited to attend the Carroll County annual meeting for this same purpose. This, too, I think was successful.

I have succeeded in getting the Home Demonstration Agent of Baltimore County to put Consumer Cooperation on her program for 1942. The Farm Bureau furnished 28 packages of material for each of the presidents of her clubs. They, in turn, will explain the movement to their respective clubs.

I was successful in having Dr. Carpenter of Brooklyn, New York, to address the convocation of Towson, a group of Episcopal clergy.

I have also been able to get a Civics teacher, in one of our public schools to present the subject to his pupils. The Farm Bureau provided the material.

Time is up, but I do want to say that there are three important reasons why the Cooperative Movement should receive more support during 1942.

1. Consumer Cooperative is democratic. In order to preserve a political democracy, we must have an economic democracy.

2. Consumer Cooperative is a way to put the teaching of Christianity into use in our daily lives. A cooperative cannot profiteer—therefore, there is no reason to try to get the best of the other fellow.

3. In the depression that will follow this war, the Cooperative movement will be a rock to which to cling, and save us from black despair which leads to upheavals.

By doing business with ourselves we will be assured that what little money we may have then will go further than that spent in profit business. This will mean more goods to more people and that is what will prevent despair of the people.

MR. LEAVERTON: Thank you, Mr. Sattler. Next is the Committee on Program and Membership. Mr. Wilbur L. Smith is Secretary of the State Program and Membership Committee, and he will now make his report. Mr. Smith is doing a good job in this capacity.

WILBERT L. SMITH: The year, 1941, showed some important developments in Farm Bureau work in Maryland. The membership of the organization has not only been maintained but substantially increased. Our quota to the National of 5,250 members was exceeded by 266 members. Our state quota of 5,500 was exceeded by 18 members.

Owing to the scarcity of labor on farms during the past year, it has been difficult to secure as many voluntary solicitors for membership as in previous years. The customary mass membership campaigns have been conducted and too much credit cannot be given to the men and women of Maryland who assisted in membership work which in many instances meant a sacrifice of time much needed on the farm. When the prizes for high solicitors are given out you will learn that the high solicitor in Maryland is a woman.

During the stress of this period we may have to utilize the services of women solicitors whenever possible and the program and membership committee recommends this procedure. We failed to meet our quota of 150 planning groups in 1941, but progress was made and we feel special effort should be made this year to form as many of these groups as possible. We are convinced that planning groups have been an important factor in membership work and also in the establishment and maintenance of services for the farm family. Several more counties have been organized in the Blue Cross hospitalization plan during the year and several counties are now working on plans for expansion of refrigerator locker services.

The whole cooperative and service program of the Farm Bureau is being better understood and developed through the educational medium of our planning groups. In the state program and membership committee meeting last night, a national quota of 5,750 members for 1942 was accepted. A state quota was set at 6,000. The state secretary and field men were instructed to revise the score sheet and include therein credit to counties who have or will organize the Associated Women in the county. The committee recommended that a study be made of some plan by which certain qualifications would have to be met before a Farm Bureau member could serve on the county Board of Directors.

Owing to the labor situation on farms, tire rationing and other factors which will make it increasingly difficult to secure solicitors during this year, the committee adopted a plan that will be presented to every county in Maryland as soon as possible which will divide the work among more people with a minimum of effort for each. Mass membership campaigns will not be conducted this year unless absolutely necessary.

We realize more and more that membership is the most important part of the Farm Bureau program. It is doubly important now. This war period finds the farmer in the first lines of defense in many fields. The reconstruction period will be what we make it. The most we can do is to pledge our undivided support to the building of a strong or-

ganization, which will demand and can secure for ourselves and our posterity equality for agriculture.

MR. LEAVERTON: Defense is an important subject at this time, and I know of no man better qualified to report on this than the Chairman of the State Defense Committee set up under the United States Department of Agriculture. It is a pleasure, at this time, to present Mr. Harry H. Nuttle, of Caroline County, who will report on the activities of the U. S. D. A. Defense Board of Maryland.

MARYLAND U. S. D. A. DEFENSE BOARD

HARRY H. NUTTLE

In December, Secretary Wise wrote me requesting that I tell of the activities of the U.S.D.A. Defense Board of Maryland. I hesitated to do so inasmuch as I knew that after December 31st I would no longer be a member of that Board. However, Ed insisted and here I am, even though I feel that present Chairman Joseph H. Blandford, Prince George's County should be making this report. Joe and I were members of the Maryland House of Delegates in 1914, when he, a Democrat and I, a Republican, found ourselves voting alike on most proposed legislation, basing our votes on the merits of such legislation and neither of us being bound by party lines. The friendship thus formed in 1914 has ripened through the years. He has plenty of good horse sense, is fearless and upright and will administer this difficult job in a manner which he believes the welfare of the nation demands. I commend him to you.

Our nation is engaged in a battle for its existence. Before December 7th, we were often divided, but now we remember Pearl Harbor and pledge our utmost that the forces of evil may be overcome.

What can the farmers do?
We can and will pay taxes.
We can and do send our boys to fight.

We can and will do the job that only we can do, that is, produce whatever food is necessary to win this war.

Secretary of Agriculture Wickard says, "Food will win the War and Write the Peace".

In order that the steps necessary to winning the war may be coordinated and directed a Department of Agriculture Defense Board has been set up in each state. It consists of the heads of the departmental action agencies in that state. Then, in each county, a county U.S.D.A. Defense Board has been named with the chairman of the A.A.A. as its chairman and the county agent as its secretary.

The food requirements of our army and navy, of our Defense workers and our other American people, and of our Allies who are helping to fight these enemies of our Democracy are estimated at least a year ahead. In

1942, for instance, we now know that we will need to feed ¼ or 10,000,000 of the people on the British Isles, in addition to our own needs. Especially wanted are the concentrated foods, high in vitamin, such as milk, cheese, eggs, chicken, pork, as also canned tomatoes and canned peas.

In order to find out what effect higher prices would have on production, a farm to farm canvas was made throughout the nation in November, listing intentions to plant in 1942 as compared with 1941. The increases or goals requested by Washington were more than met in Maryland with three exceptions. For instance, they asked 7% more milk, we found an intention to produce 10% more. They asked 15% more hogs, we expect to produce 30% more. A larger increase than asked is also expected in beef, soybeans, eggs and chickens.

The three exceptions are in farm gardens, canned peas and canned tomatoes.

In farm gardens, an increase of 18% was requested. We secured less than 1%. We, in Maryland, should put increased emphasis on the value of a good, year-round farm garden from the angle of both nutrition and economy.

In canned peas the indicated increase was also very little as against a request of 30%. However, a contract price of about $70.00 per ton may change that picture.

In canned tomatoes farmers planned an increase of 18% as against 25% asked. As an incentive to increased production, the government is now offering to buy out of 1942 pack all tomatoes offered at a price of 95¢ per doz. for No. 2 standard, provided the canner contract with the farmer at an increase of at least $5.00 per ton over 1940 prices. The State and County Defense Boards are the agencies which fix minimum prices and certify that canners have complied with requirements.

The State Agricultural Defense Board felt very strongly that increases in milk, eggs, pork and chickens would be more easily attained if farmers in commercial corn counties were permitted to plant their usual corn acreage. We arranged a conference with Assistant Secretary of Agriculture Grover Hill at which prominent dairymen presented the feed problem of Maryland. However, corn allotments apparently face the farmers of eleven of our Maryland counties.

The demands of the war god for aeroplanes, tanks, ships, guns, shells, and trucks have compelled O.P.M. to restrict the amount of steel to be used in new farm machinery to 85% of that used in 1940. However, they are giving us 150% of 1940 requirements for repairs and replacement. So, part of the job of the State and County Agricultural Defense Boards is to awaken the farmers to the need of seeing that his present machinery is in working shape. The State Board of Education through its vocational teachers, the N.Y.A., the Extension Service and the De-

fense Boards are all cooperating in this effort. Facilities are to be set up where needed, supplies of repairs parts checked and every farmer in the state circularized. We feel they are not yet awake to the need of immediate action, and we ask you to take back home the message that repair of farm machinery is urgent and of major importance, if production is to be maintained.

You can see that the job of the Defense Boards is to remove bottlenecks in production, see that essential supplies of seed, fertilizer, machinery and labor are available and thus secure from the farmer the food the nation needs. In most cases, this means an increase in production is asked. But sometimes, it works the other way. This is true of wheat in which an 11% decrease is asked. Cotton, tobacco, field corn and cannery corn are also to be kept below last year's levels.

Farmers, as a rule, are independent people. They believe in the freedom of the individual to do as he pleases as long as he doesn't impose on someone else. However, the wide-awake farmer is now beginning to realize that by himself he can protect neither himself, his family, nor his economical and social interests. So, he is uniting with other farmers in farmer cooperatives to compete with and protect himself against big business.

So, he is uniting with other farmers in the Farm Bureau to give himself legislative equality with other organized minorities.

It is necessary that in this crisis he unite with other farmers and work with the county and state U.S.D.A. Defense Boards to produce the kinds and quantities of food that we must have to meet the threat of the Nazis and the Japs.

I have no fear that if we but get the message to the American farmer he will produce the food we need to win this war.

AFTERNOON SESSION

MR. TURNER: Some time ago I attended a banquet where a man was presented a medal for good work in his county for ten years in 4-H club work. That man is an outstanding dairyman, President of the Allegany County Farm Bureau, and also president of a dairy plant that distributes milk in Cumberland. I now present to you, Mr. R. C. Wilson, President of the Allegany County Farm Bureau, as your Chairman for this afternoon's session.

MR. WILSON: Thank you, Mr. Turner. I am sure I speak for all Allegany County when I say we feel flattered to be on your program. We are a very small county, and I guess we have about the smallest membership in our county. There is very little farm land in our county. We are an industrial county, and we produce the finest coal anywhere in the State of Maryland. We have only been organized four years. It is a very great pleasure to meet the people of the State and work with

them, and make warm friendships. I am sorry, but I am a great deal more at home milking a few cows than standing before a public audience. The first thing on the program this afternoon is the presentation of some medal awards. I have been very much interested in the 4-H boys. The presentation is in charge of Dr. H. F. Cotterman.

DR. COTTERMAN: It is always a very great pleasure to present the Farm Bureau awards to the boys in the F.F.A., composed of high school group organizations. This F.F.A. is limited to high schools, and, in all, there are 3,500 boys taking the vocational course in the high schools each year. The Farm Bureau gives 36 medals for the different classes, and of those 36 awards today there are only 26 boys present. The medals for the other boys will be sent to them. Mr. Turner, will you present the medals?

MR. TURNER: Boys, you are the future citizens and farmers of America. I hope you will be future Farm Bureau members. I am proud of you. There is no more important work than the work that is being done in the vocational schools in educating you boys to be good farmers in the future. I want to say that a year ago I attended your annual meeting in Frederick, and I was given an honorary membership in the form of this medal. I have no possession that I prize more than I do this medal.

Mr. Turner then presented the following medals:

LIST OF WINNERS
in the
MARYLAND FARM BUREAU—F. F. A. PROJECT CONTEST

Project	Rank	Winner	Teacher	High School	Medal
Baby Beef:	First	William J. Hines, Jr.	Sydney T. Lawler	Sherwood	Gold
	Second	Richard Florence	Robert K. Remsberg	Emmitsburg	Silver
1.	Third	John Guard	Charley B. Miller	Friendsville	Bronze
Corn:	First	William B. Shiene	C. Merrick Wilson	Poolesville	Gold
	Second	Karl Flerlage	T. C. Martin	Hughesville	Silver
2.	Third	Donald E. Stutler	Sydney T. Lawler	Sherwood	Bronze
Dairy:	First	C. Renn Remsberg	J. Homer Remsberg	Middletown	Gold
	Second	John A. Holter	J. Homer Remsberg	Middletown	Silver
3.	Third	Holmes Baker	Hugh Keller	Libertytown	Bronze
Potato:	First	John J. Schlosnagle	Marvin G. Callis	Accident	Gold
	Second	Everett McClintock	Marvin G. Callis	Accident	Silver
4.	Third	Karl Flerlage	T. C. Martin	Hughesville	Bronze
Poultry:	First	Donald E. Stutler	Sydney T. Lawler	Sherwood	Gold
	Second	Charles E. Marker, Jr.	Harold A. Ramsberg	Smithsburg	Silver
5.	Third	Guy Lewis	C. Merrick Wilson	Poolesville	Bronze
Swine:	First	James G. Trout	Hugh Keller	Walkersville	Gold
	Second	Ferdinand Nagel	Gerald Biggs	Federalsburg	Silver
6.	Third	Harold Sater	Harry McDonald	Sparks	Bronze
Tobacco:	First	Mason Birkhead	Clayton Libeau	Arundel	Gold
	Second	Harry Adams	T. C. Martin	Hughesville	Silver
7.	Third	Karl Flerlage	T. C. Martin	Hughesville	Bronze

Project	Rank	Winner	Teacher	High School	Medal
Tomato:	First	William Earle Davis	Gerald Biggs	Federalsburg	Gold
	Second	Hiram Stoltzfus	Howard Anderson	Marion	Silver
8.	Third	Virgil Adams	Gerald Biggs	Federalsburg	Bronze
Diversified	First	*Karl Flerlage	T. C. Martin	Hughesville	Gold
Farming:	Second	†Everett McClintock	Marvin G. Callis	Accident	Silver
9.	Third	‡Donald E. Stutler	Sydney T. Lawler	Sherwood	Bronze
Miscell.	First	Fred T. Hooper(wormseed)	Paul Seitzer	Mt. Airy	Gold
Crops:	Second	Donald E. Stutler (soybeans)	Sydney T. Lawler	Sherwood	Silver
10.	Third	Thomas Seibel (apples)	Sydney T. Lawler	Sherwood	Bronze
Miscell.	First	John Stoneburner (sheep)	Sydney T. Lawler	Sherwood	Gold
Livestock:	Second	Wayne Umbell (sheep)	Charley B. Miller	Friendsville	Silver
11.	Third	Everett McClintock (Hereford heifer)	Marvin G. Callis	Accident	Bronz
Miscell.	First	Charles Eccard (beans)	J. Homer Remsberg	Middletown	Gold
Truck:	Second	Frank Eccard (beans)	J. Homer Remsberg	Middletown	Silver
12.	Third	E. Charles Smith (raspberries)	Manville Coblentz	Boonsboro	Bronze

*4 acres tobacco
1 dairy heifer
1 acre potatoes
5 acres corn
1 acre garden

†1 acre potatoes
150 broilers
1 acre wheat
1 acre corn
1 Hereford heifer
4 ewes

‡5 acres soybeans
260 young chickens
3 acres corn

MR. WILSON: I am pleased to present now a man who has been working in our State organization for several years, and his advice and counsel have been very valuable to us. I now present Mr. W. P. Walker, who will discuss the Tax Committee Report.

(Abstract of his discusssion)

MR. WALKER: The report of the Joint Tax Committee of the Maryland State Grange and the Maryland Farm Bureau emphasizes the likelihood of more indirect taxes in the immediate future and points out that such indirect taxes will be added to the property tax load of farmers. Excise taxes on various articles purchased by farmers were levied by the Federal Government in 1941.

Changes in the Federal tax law now require each married farmer having a gross income of over $1,500 to make out an income tax return, but this does not necessarily mean that every farmer will pay an income tax. Keeping farm records is an advantage for income tax purposes. A record of cash receipts and disbursements will be adequate and it is suggested that you keep a copy of the income tax returns for reference in making out returns in future years.

Several important state tax laws were enacted by the 1941 General Assembly. The state income tax rates were reduced, and the method of determining taxable income was changed to a net income basis. These changes agree, in general, with recommendations of the farm organizations. The County Commissioners were authorized to exempt household furniture from property taxes. Permanent Boards of Assessors were created in two counties.

Average motor vehicle travel per year by farmers is considerably less than that of other groups. However, such travel is quite essential for farmers because of the lack of alternative transportation facilities and the necessity of travel for business purposes. Therefore, good roads will be important to farmers during this emergency.

There are many who believe that local rural roads, sometimes called land access roads, should be financed solely by property taxation. Your Committee is of the opinion that traffic on local roads produces highway user revenues and that the application of such revenue for rural road purposes should not be denied, otherwise farm property taxes will be materially increased for road purposes.

Your Committee points out the upward trend in the county tax rate required to be levied to participate in the school equalization fund and cautions against any further increase. The Committee also believes that effort should be made to improve the assessment of personal property rather than to exempt such property.

The financial condition of the State government was studied by the Committee. Although the State's surplus has grown to a considerable amount, it was the opinion of the Committee that the future was too un-

certain to make any further reduction in the State surplus, especially if made by a reduction in the income tax. Therefore, the Committee opposed a special session of the General Assembly.

ANNUAL REPORT OF THE JOINT TAX COMMITTEE OF THE MARYLAND STATE GRANGE AND THE MARYLAND FARM BUREAU FEDERATION, 1941–42

SUMMARY

The report of the Committee contains a discussion of the following subject matters:

(1) Trend of Farm Taxes in Maryland

Average tax rates against farm property increased from $1.21 per hundred dollars of assessed value in 1934-35 to $1.50 in 1941-42. This compares with the peak tax rate of $1.83 in 1929-30.

(2) Federal Defense Taxes (including some detailed data on Federal income taxes).

Trucks, electric and gas appliances, and washing machines are subject to a Federal manufacturer's excise tax. A Federal retail tax is applied to radios, refrigerators and telephone and telegram charges. Motor vehicles are subject to a $5 Federal use tax for the next fiscal year. Married farmers are required to file a Federal income tax return if their gross income exceeds $1,500.

(3) Major State Legislation in 1941

The state income tax rates were decreased and the method of calculation was changed from a gross income basis to a net income basis. County Commissioners may, by resolutions, exempt all household furniture from property taxation. Permanent Boards of Assessors were created for two counties and authorized for another county.

(4) Highway Problems

In 1925, about 29 per cent of the farms in Maryland bordered surface roads, whereas 55 per cent of the farms were adjacent to surfaced roads in 1940. The 1941 road law permits gasoline tax allocations to the counties to be used for the improvement of roads that will remain in the county systems. This lowers the cost of improving rural roads and should result in better road facilities to a greater number of rural people.

(5) School Finances

The school county tax rate required to be levied before a county can participate in the equalization fund was increased in 1939 from $.47 to $.51.

(6) Personal Property Assessments

The present system of administering personal property assessments results in the escape of much property from tax rolls and a lack of uniformity in assessing personal property.

(7) Economy

Curtailment of public improvements which are not urgent will assist the defense program by releasing labor and materials, and postponement of such will provide work after the war when employment is slack.

(8) State Finance and Its Relation to the Proposed Special Session of the General Assembly

The dedication of $2,000,000 of the State surplus annually toward reducing the state property tax in 1942 and 1943 leaves a prospective net surplus of over $3,000,000 at the end of this biennium, after setting aside $2,000,000 as a working fund for the State. Due to uncertain yields of several important state taxes, and in view of the present emergency conditions, this prospective surplus does not seem to be too large.

Suggestions and recommendations of the Committee are as follows:

(1) Highway users taxes, that is, gasoline taxes and motor vehicle license fees, should be used in financing the program for rural roads.

(2) Further increases in the basic county tax rate requirement for participation in the school equalization fund should be opposed.

(3) A vigorous effort should be made to improve the assessment of personal property.

(4) State and county governments should curtail improvement programs to bare necessities during the period of defense activity.

(5) During war-time prosperity state and county governments should reduce and retire their outstanding debts.

(6) A special session of the General Assembly for reducing income tax rates should be opposed.

(7) State finances should not be disturbed further at the present time.

MR. WILSON: I never had the pleasure of introducing a former Governor before, but it gives me great pleasure to present Former Governor Clifford Townsend, who is now Director, Office of Agricultural Defense Relations, U. S. Department of Agriculture.

Governor Townsend discussed the work and duties of the Office of Agricultural Defense Relations. He stated that his office was primarily concerned with assisting in the war production effort and securing priorities to aid farmers in meeting the present emergency. He discussed the national goals, the shortage of farm labor, and the shortage of farm machinery. He urged farmers to do everything in their power to repair old farm machinery and to help otherwise to conserve things that are vital to war requirements.

MR. WILSON: We have only one more speaker on the program, but before she gives her address, I will call for the report of the Credentials Committee.

REPORT OF CREDENTIALS COMMITTEE

County	Paid-up Members	Number of Directors	Number of Delegates
Allegany	82	1	2
Anne Arundel	250	1	5
Baltimore	463	1	9
Calvert	164	1	3
Caroline	265	1	5
Carroll	372	1	7
Cecil	106	1	2
Charles	244	1	5
Dorchester	126	1	3
Frederick	724	1	14
Garrett	114	1	2
Harford	389	1	8
Howard	161	1	3
Kent	235	1	5
Montgomery	281	1	6
Prince George's	277	1	6
Queen Anne's	164	1	3
St. Mary's	132	1	3
Somerset	181	1	4
Talbot	143	1	3
Washington	238	1	5
Wicomico	270	1	6
Worcester	137	1	3
Associated Women		2	6
Maryland Stockmen's Association		1	1
Maryland State Horticultural Society		1	1
Maryland State Poultry Council		1	1
Maryland Cooperative Milk Producers, Inc.		1	3
Maryland Tobacco Growers Association		1	3
Hillsboro-Queen Anne Corporation		1	1
Maryland Vegetable Growers' Association		1	1
Maryland State Beekeepers' Association			
Maryland Crop Improvement Association		1	1
Maryland State Horsebreeders' Association		1	1
Maryland Holstein-Friesian Association			
Maryland Ayrshire Breeders Association		1	1
Total	5,518	35	132

RICHARD BLACKBURN, Chairman
F. RIDGELY TODD
CLAUDE PHILLIPS
J. D. KING
JULIUS PARRAN

Mrs. Mies gave an excellent address on the present need for united efforts of farm families. She stated that our nation was settled by people who wanted freedom, who wanted peace, and wanted to manage their own affairs. She discussed the early migration of our people to the Middle West and then on to the coast. She told of the privations and vicissitudes which early settlers encountered. She pointed out that there is no longer virgin farm soil, that there is no new land to settle, and that farmers are now in competition with every part of the world. She emphasized the importance of new standards in homemaking. She discussed the world war, stating that, whatever the ending, no one can predict just what the adjustment will be.

Mrs. Mies congratulated President Turner and Secretary Wise on their reports in which they urged that it is necessary for all people to work together today. She stated, "Farm people must realize that we can best take care of our own business by assisting in taking care of the best interests of all and let us at this time evaluate intelligently our obligations in order that we may best serve our Government and by so doing also serve ourselves".

FRIDAY, JANUARY 9, 1942

Chairman — P. C. TURNER

MR. TURNER: Will the convention please come to order. The by-laws require that notice of meetings should be given prior to the meeting. This legal requirement has been complied with, and Mr. Wise will now read that notice.

Mr. Wise read the call.

TO COUNTY SECRETARIES AND
AFFILIATE AND ASSOCIATE SECRETARIES

Notice of Annual Meeting of Members of
Maryland Farm Bureau, Inc.

Dear Sir:

Official notice is hereby given you that the Board of Directors of the Maryland Farm Bureau, Inc., has authorized the calling of the next annual meeting of the Corporation for January 8 and 9, 1942, Lord Baltimore Hotel, Baltimore, Md.; the meeting to continue from day to day until all business that may come before the meeting has been properly disposed of. All sessions of the annual meeting will be held in the ballroom of the Lord Baltimore Hotel.

Very truly yours,

C. E. WISE, JR., Secretary-Treasurer
Maryland Farm Bureau, Inc.

CEW:MD

MR. TURNER: We will now have the roll call of voting delegates and directors.

ROLL CALL OF VOTING DELEGATES

Allegany: R. C. Wilson, J. Wm. Loar, Mrs. J. Wm. Loar; *Anne Arundel*: O. F. Grimes, Lawrence King, Ralph Leitch, Stallings Moreland, W. P. Harrison; *Baltimore*: F. Ridgely Todd, Wm. I. Wolf, C. N. Montayne, Raymond Armacost, Frank Denton, Lionel Ensor, Harry Cannaday, John F. Kolk, Elmer Koppleman, Webster Anderson; *Calvert*: Julius P. Parran, John C. Ward, J. Duke Belt, Estep Watson; *Caroline*: Richard Blackburn, Harold Clark, N. E. Taylor, C. J. Kern, H. H. Reick, James Stack; *Carroll*: John D. Young, Solomon L. Hoke, Mrs. John Goodwin, Sterling Leister, Tivis Buckingham, John S. Bushey, Wilbur Naill, Clarence Motter; *Cecil*: D. B. McDowell, Harvey Simmers, Winter D. Brown; *Charles*: S. C. Linton, Leonard Keller, Miss Eloise Gardiner, Mrs. P. D. Brown, Robert Martin; *Dorchester*: S. W. Linthicum, A. R. Peterson, D. Floyd Brinsfield, Earle R. Keene; *Frederick*: Alvie M. Etler, Sterling Spurrier, C. W. Angleberger, G. Marshall Wachter, Russell C. Fisher, Raymond C. Putman, C. Russell House, L. Roy Remsberg, Philip O. Coblentz, L. H. Crickenberger, J. G. Garst, D. Walter Hooper; *Garrett*: Wm. Winterberg, David J. Hummel; *Harford*: T. Roy Brookes, Howard Turner, W. A. Heaps, Arthur Jackson; *Howard*: Roby H. Mullinix, Raymond Colton, Harry F. Musgrove, G. Cashell Nichols; *Kent*: H. S. Leaverton, W. R. Newnam, A. L. Beaston, H. S. Ford, Edgar Lusby, Ralph Geary, L. A. Sutton, B. F. Rash, Wm. O. Coxon, Walter H. Hadaway, Harry T. Williams; *Montgomery*: James D. King, Willson C. Poole, Ulysses Griffith IV, Edwin D. Fry; *Prince Georges'*: J. E. McCue, Jos. H. Blandford, Wm. E. Duvall, Sr.; *Queen Anne's*: Merton R. Shawn, John W. Smith, Chas. I. Boyle; *St. Mary's*: Frank Hayden, Robert Stevens; *Somerset*: Wm. T. Chaffey, W. C. Hayman, Neal Widdowson; *Talbot*: Carroll Lowe, Albert J. Fike, W. Forde Adams, A. H. Spies; *Washington*: R. C. F. Weagly, John N. Newcomer, Fred H. Wishard, Amos Reeder, Paul Kretzer, Howard Swain; *Worcester*: S. O. Northam, Ralph E. Shockley, Albert Dickerson, Lester D. Shockley; *Md. Crop Improvement Assn.*: Edwin Warfield, Jr.; *Md. Coop. Milk Producers*: R. W. Shermantine, DeWilton C. Parlett, C. M. Merryman, F. F. Hering; *Md. Horse Breeders Assn.*: Janon Fisher, Jr., Charles L. Hammond; *Md. State Horticultural Society*: J. Andrew Cohill; *Md. State Poultry Council*: Harry H. Rieck, H. R. Peterson; *Md. Stockmen's Assn.*: J. E. Muncaster, J. H. Snyder; *Md. Tobacco Growers Assn.*: Thomas Parran, W. P. Harrison, J. E. McCue; *Md. Vegetable Growers Assn.*: Geo. H. Strattman.

After the roll call, Mr. Richard Blackburn of Caroline County moved the report of the Credentials Committee be accepted and the directors confirmed. Seconded by Mr. Todd. Carried.

Mr. Turner asked Mr. Weagly, Vice-President, to take the chair.

MR. WEAGLY: We will now have the minutes read by Mr. Wise.

Mr. Wise read the minutes of the annual meeting January 17, 1941.

MR. WEAGLY: What is your pleasure?

It was moved, seconded and carried that the minutes be accepted.

MR. WEAGLY: We will now have the Treasurer's report by Mr. Wise.

Copies of the Treasurer's report were distributed in the room and Mr. Wise read portions of it.

Mr. Joseph Blandford, of Prince Georges Co. moved the report be accepted, and Mr. Switzer of Talbot County seconded the motion, and it was carried.

MR. WEAGLY: We will now have the report of the Audit Committee.

Mr. Roby Mullinix, chairman, of Howard County, read the following report:

January 6, 1942

Mr. President:

Your Auditing Committee met with Mr. William R. Dance, Registered Public Accountant, and checked the Treasurer's Report with the Books and Accounts of the Maryland Farm Bureau, Inc., and find them accurate in every respect. The securities in the bank box correspond with the account.

All bills for 1941 that have been presented have been paid.

The whole report shows a healthy condition of the Maryland Farm Bureau and much credit should be given the management and office force for their excellent work during the past year.

ROBY MULLINIX, Chairman
JOHN D. YOUNG
H. S. LEAVERTON
W. T. CHAFFEY

MR. WEAGLY: What is your pleasure with this report?

Mr. James D. King of Montgomery Co. moved it be accepted, and Mr. J. B. McCue of Prince Georges Co. seconded the motion and it was carried.

MR. WEAGLY: We will now have the Resolutions Committee report.

Mr. Turner resumed the chair.

MR. TURNER: The Vice-President is Chairman of the Resolutions Committee, and I want to say that is a job. It has more work than any other job. I want to commend the Committee this year for doing an excellent job.

Mr. Weagly then read the resolutions and moved the adoption of each.—

Mrs. P. D. Brown, of Charles Co. seconded the Foreword.

Mr. Spies of Calvert Co. seconded the first.

Mr. Rieck of Queen Anne Co. seconded the second.

Mr. Roby Mullinix of Howard Co., Mr. Shawn and Mr. Switzer, and Mr. Wilson of Allegany Co. seconded the third.

Mr. John Young of Carroll Co. seconded the fourth.

Mrs. Edwin Fry seconded the fifth.

Mr. Harry Reick seconded the sixth

Mr. James King seconded the seventh.

Mr. Colton, of Howard County, seconded the eighth.

Mr. Benjamin Amoss, of Harford County, seconded the ninth.

Mr. Loar, of Allegany County, seconded the tenth.

Mr. Reick, of Carroll County, seconded the eleventh.

MR. COLTON: I would like to say that individual locker plants are a need of the present to preserve the fruit, not six months from now. That is the purpose of this resolution I am going to offer. (Reading):

> "A patriotic action of far greater magnitude than the purchase of Defense Bonds, and incidentally of far-reaching benefit to ourselves, is the preservation of wholesome foods in a nourishing condition. It is, therefore, the duty of this organization to utilize at least a portion of its increased assets to establish a greater number of locker plants throughout the State of Maryland."

MR. TURNER: Would you be willing to refer that to the Board of Directors? We have that money in trust, and it is a big question whether we should authorize the officers of this organization to spend the money, especially at this time.

MR. COLTON: In answer to that, I am relatively a new-comer in the ranks of Maryland Farm Bureau, and I am willing to be guided by the will of the delegates as a whole. I think it is a matter that should be put to the vote, but I have no knowledge of your mode of procedure.

MR. MCCUE: It seems to me that is out of order for one reason, and that reason is that the State funds invested by all the counties of Maryland should not be used for any individual county. How could each and every county be given a unit of the locker system handled by the local Boards when that service becomes available? I think that locker system had better be determined by the local farm groups rather than the State group. I move that this resolution be laid on the table.

The motion was seconded and carried.

MR. COLTON: I now offer the following resolution:

"Because of the rationing of tires by the Federal Government, a large number of our County Agents and Home Demonstration Agents have already curtailed their travel and activities. In order to assure the success of our agricultural defense projects which depend so urgently upon these Agents, this organization shall take every reasonable measure to obtain prompt guarantees from the proper authorities that these Agents will receive adequate rations of tires to permit them to resume immediately and continue their accustomed duties."

Mr. Musgrove seconded the motion.

MR. TURNER: That is certainly one of the things that we will try to see is carried out. Dr. Symons, would you care to say anything about that?

DR. SYMONS: The O.P.M. did not recognize that as a factor. I believe it would be better to let that matter wait, and use your efforts later on.

MR. TURNER: Do you make any motion? That is a real live problem.

MR. MCCUE: I see no reason why that should not be included in the list of resolutions.

Mr. Colton moved its adoption, and Mr. Hogue seconded the motion and it was carried.

MR. COLTON: I wish to offer the following resolution:

"When gasoline is used in unlicensed vehicles on the farm, the amount of the State tax is refunded upon representation by the purchaser. Where a vehicle is licensed by the State, even though it is used primarily or even exclusively on the farm, the State refuses to refund the tax payment. It is the attitude of this organization that the amount of tax paid for gasoline used in vehicles on the farm be refunded, whether or not such vehicles are licensed."

MR. TURNER: It will take legislative action to put that over. This is an off year with the Legislature, and we have refrained from including any resolutions as to laws that might come before the General Assembly. The situation may be very different this time next year just before the meeting of the General Assembly.

MR. COLTON: I realize that. These are not my original thoughts. The thing is that these are the things that come up in the minds of the members and if some one does not bring them before this body, they do not get a chance to express themselves about them.

MR. TURNER: I am going to ask Mr. Wise to make some remarks on this.

MR. WISE: The gentleman asked me about this question the other night. I outlined to him what I thought about it, and for your informa-

tion I want to give you those thoughts briefly. We have a refund on gasoline now, and during the last three sessions they have taken up restrictions which might make it more difficult to secure the refund. We hesitate to open up that subject. We think it would be better not to. If we had an amendment to our present laws introduced requiring this refund, I am afraid the way the Legislature is constructed now we would lose some of the gains already made. However, we are willing to go to battle on this if the majority of the delegates wish it. My advice is to take it easy for the present, but if the delegates want to take that chance we will gladly do everything possible.

MR. HARRY REICK: I move that this resolution be laid on the table. Mr. Ridgely Todd seconded the motion and it was carried.

MR. TURNER: I think after Mr. Wise's remarks we all feel that perhaps it would be better to wait.

MR. COLTON: I might preface the following resolution by the remark that we might not get another chance to offer it, and we have a number of dairy farmers in our county who are very much interested in the enforcement of the proposed regulations of the Baltimore City ordinance, supposed to go into effect October 1, 1942. We have been active in our county in discussing this question, the possibilities of it and the disastrous effects it might have. We have heard representatives from the Baltimore City Health Department tell us if we did not have our barns right, if they were two inches out of the way we would not receive the milk permit. This resolution is directed toward that. I move its adoption.

"The impending shortage of milk is one of the principal food concerns of our Country in this grave period. It is the position of this organization that everything possible be done to increase the production of milk throughout the State and that the enforcement of the arbitrary regulations effective on October 1, 1942 of the Baltimore City Health Department be vigorously opposed with a view towards having them rescinded."

Mr. Fisher, of Frederick County, seconded its adoption.

MR. TURNER: I would like to make a statement. There have been some rules and regulations laid down over a year ago which required certain modifications in the barns, and I went with a group before Dr. Williams, and we later had a letter from him in which he stated he would issue permits to any dairy farmer who made a conscientious effort to meet the requirements, but because of the high price of material and shortage of labor in this territory on account of the defense program, he would not bear down and refuse permits because of a few inches in the barn. A lot of people think we are embarking on a five or ten year war, and I do not think we should consider this resolution too seriously. The time for issuing permits for this year has already passed,

and I do not think this is the time for us to stir this up. I might say that there are people in the West who want this market. I belong to the Committee on Dairying of the National Farm Bureau, and I have been trying to explain to them that our requirements were very high, and if they came into this market they would not get the business. Now, I do think that Dr. Williams is not going to be too strict in the enforcement of that ordinance for some time. He has already said he is not going to do that. A lot of the old regulations have not been lived up to. My understanding is,—but I might be wrong,—that he will not be too strict. I have not known of a single man who had his permit refused because of the size of his barn.

Extended discussion followed ending in the following action.

DR. SYMONS: I move that we lay this matter before the Board of Directors of the Farm Bureau.

Mr. John Bushey seconded the motion and it was carried.

MR. NICHOLS of Carroll Co.: We started this movement and we are going to fight this thing. We had a meeting and Mr. Gaddis from the Health Department was there, and he gave us the impression that they were going to be strict in the enforcement of that regulation.

The following resolution was read:

We, the Maryland Farm Bureau, Inc., in Convention assembled desire to recognize with gratitude the contribution made to our program by M. Clifford Townsend, Director of Agricultural Defense Relations, U. S. Department of Agriculture, Mrs. Elsie W. Mies, President of the Associated Women of the A.F.B.F., Gov. Herbert R. O'Conor, Dr. T. B. Symons, W. P. Walker, Ernest Robert Rosse and Dr. Roger B. Corbett.

We are grateful to the management and staff of the Lord Baltimore Hotel for their fine cooperation.

We extend our thanks to the Press, to all those who, as speakers, committee members and workers helped to make this twenty-sixth annual meeting such an outstanding success, and especially do we recognize the outstanding service given by President Turner, Secretary Wise and others of the staff of our state organization.

Mr. Hogue seconded the motion to pass this resolution and it was carried.

MR. WEAGLY: I move we adopt thesse resolutions as an entirety.

Mr. Sam Linton of Charles Co. seconded the motion and it was carried.

MR. WEAGLY: I move we adopt these resolutions presented by the Associated Women of the Maryland Farm Bureau, Inc., adopted at the fourth annual convention held in Baltimore, Md., January 7, 1942. I

understand that we either adopt or reject them as a whole. We cannot alter or change them. (Note: printed with resolutions on pages following these minutes).

Mr. Sam Linton moved their adoption and Mr. Spies seconded the motion and it was carried.

MR. TURNER: They are very excellent. I don't know where we would be in the Maryland Farm Bureau if it were not for the excellent work done by the women. Mr. Weagly then read the names of the Resolutions Committee and thanked them for their cooperation.

MR. TURNER: Many of you, I hope all of you, have read the Tax Committee report. I would like some one to move that that report be accepted. Mr. Spies moved that the report be accepted as presented, and Mr. McCue seconded the motion, and it was carried.

MR. TURNER: We will now proceed with the election. The By-laws call for a meeting of the Board of Directors the day before, and I will ask Mr. Wise to give you their report and then take the chair.

MR. WISE: The Board of Directors nominated Mr. P. C. Turner to be its candidate for president of the Maryland Farm Bureau for the following year.

Mr. Winterberg moved the nominations be closed and that the vote be taken by acclamation.

Mr. Rieck seconded the motion and it was carried.

Mrs. Edwin Fry moved the secretary be authorized to cast the ballot, and Mr. Bushey seconded the motion, which was carried unanimously.

MR. WISE: I hereby cast the ballot for Mr. P. C. Turner as President of the Maryland Farm Bureau for 1942. We will let him conduct the balance of the meeting.

MR. TURNER: It is with a deep sense of responsibility in these trying days that I accept the Presidency of the Maryland Farm Bureau for 1942. I ask your help and cooperation in our efforts to meet these trying conditions. I thank you.

MR. TURNER: Next, we have the selection of the vice-president.

MR. WISE: Your directors nominated Mr. R. C. F. Weagly to be vice-president. Mr. Blandford moved the nominations be closed, and Mr. Brookes seconded the motion which was cerried.

Upon motion, duly made, seconded and carried unanimously, Mr. Wise was authorized to cast the ballot for Mr. Weagly as vice-president for 1942. The secretary cast the ballot.

MR. WEAGLY: You remember I told you from the floor I considered the vice-president merely a spare tire. I hope if my time ever comes to substitute for the President, I will do it well, but I have not had an opportunity as Mr. Turner has been on the job at all meetings. I have been glad to cooperate with him. Thank you for your confidence in me.

MR. TURNER: I consider Roy Weagly the biggest little man in the state of Maryland.

The following motion was made by Mr. King, seconded by Mrs. P. D. Brown and carried:—"I move that the actions of the Board of Directors as contained in the minutes of their proceedings since the last corporation meeting be and are hereby approved and ratified."

Directors as certified by the counties and affiliated organizations:

Allegany Co.—R. C. Wilson
Anne Arundel Co.—O. F. Grimes
Baltimore Co.—F. Ridgely Todd
Calvert Co.—Julius Parran
Caroline Co.—Richard Blackburn
Carroll Co.—J. D. Young
Cecil Co.—D. B. McDowell
Charles Co.—S. C. Linton
Dorchester Co.—S. Linthicum
Frederick Co.—A. M. Etzler
Garrett Co.—Wm. Winterberg
Harford Co.—Fred C. Jones
Howard Co.—Roby Mullinix
Kent Co.—H. S. Leaverton
Montgomery Co.—J. D. King
Queen Anne's Co.—Merton R. Shawn
St. Mary's Co.—F. D. Hayden
Somerset Co.—Wm. T. Chaffey
Talbot Co.—Carroll Lowe
Washington Co.—R. C. F. Weagly
Wicomico Co.—C. C. Phillips
Worcester Co.—S. O. Northam
Associated Women: Mrs. Edwin D. Fry
Mrs. P. D. Brown

Honorary Directors:

Associated Women Mrs. Harry L. Davis
Mrs. Atlee Armour
Mrs. Forde Adams
Mrs. Walter Lankford
Mrs. Carroll Rinehart

H. H. Nuttle
H. C. Byrd
T. B. Symons
T. Roy Brookes

Md. Ayrshire Breeders' Assn.—Ed. F. Stanfield
Md. Crop Improvement Assn.—Edwin Warfield, Jr.
Md. Cooperative Milk Producers—R. W. Shermantine
Md. Horse Breeders' Assn.—Janon Fisher, Jr.
Md. State Horticultural Society—J. Andrew Cohill
Md. State Poultry Council—Harry H. Reick
Md. Stockmen's Assn.—J. E. Muncaster
Md. Tobacco Growers' Assn.—Thomas Parran
Md. Vegetable Growers' Assn.—Geo. H. Strattman

Moved, seconded and carried that the directors certified by the Credentials Committee be confirmed.

Mr. Sam Linton moved to adjourn, and Mr. Spies seconded the motion. Meeting adjourned at 11:30 a.m.

RESOLUTIONS 1942
MARYLAND FARM BUREAU, Inc.

FOREWARD

At this time we meet in the midst of a conflict that is a challenge to Democracy and to civilization. The Maryland Farm Bureau accepts the challenge and faces the future with confidence, courage and determination.

With America at war, we are called upon to win the battle of production that will require all our resourcefulness and energy. Food will win the war and write the peace and American Agriculture is called upon to feed this nation and its Allies. Those who are giving their all to preserve that peace and happiness that we have for so long cherished and that, God willing, we will continue to cherish, must be supported by an ever increasing flow of production, both Agricultural and Industrial. In furtherance of this objective, we endorse the program of the A.F.B.F. and hereby dedicate our lives, our fortunes, and our sacred honor to the preservation of those ideals of freedom and Democracy upon which this great nation was founded. In full recognition of the seriousness of the task that lies ahead, we pledge ourselves to willingly make any sacrifices required that our christian heritage may endure, for our children and our children's children, so help us God.

PRICE CONTROL AND INFLATION

1. Any price control legislation must include authority to control inflationary wages as well as inflationary prices. We cannot give our support to any legislation to control prices which does not provide for control of inflationary wages comparable to the control of industrial and farm prices.

We further recommend that no prices be fixed on agricultural products except with the approval of the Secretary of Agriculture.

TAXATION

2. We continue to insist that all permanent taxes, both state and national, be based on the principle of ability to pay. To this end we vigorously reaffirm our position on the income and luxury commodity taxes. We believe that our long-time program of gradual reduction and ultimate elimination of the State real estate tax is for the best interest of our state.

LABOR

3. Maryland farmers have pledged all-out production to meet war needs and are determined there will be no "bottlenecks" in the farm industry. Because "Manpower is as important on the farm as it is in the factory or in the army".

The limited supply of regular and seasonal farm labor makes it imperative that steps be taken to insure that all possible sources of labor be made available to farmers and the processors of farm products.

We urge the continuation of deferment for farm labor, the stoppage of all W.P.A. projects, a broadened use of prison labor on farms or to release other men for farms and that consideration be given to the use of conscientious objectors as farm laborers.

We recommend that piece workers in the processing of farm products be exempted from the provisions of the wages and hours regulations during the war emergency.

We further recommend a "Work or Fight" program.

FARM EQUIPMENT PRIORITIES

4. If the request for increased production of farm products by the Federal Government is to be met, it is essential that the proper Government authorities take immediate steps to assure agriculture necessary supplies of repair parts, replacements, new equipment, and tires for trucks and autos used for farm-to-market purposes as farm trucks are definitely a part of farm equipment. Recognition must be given to supplying the equipment that is essential in the preparation and processing of needed farm commodities for market. The Nation cannot safely ignore the fact that the greatly reduced supply of experienced farm labor will require a larger quantity of labor-saving machinery; and that as a result of the long period of low farm income, much machinery and equipment has become obsolete and must be substantially repaired or replaced.

COORDINATION OF AGRICULTURAL PROGRAMS

5. We view with deep concern the growing tendency of Government agencies to set up special field personnel to contact farmers every time a new program is to be developed or a new job is to be done.

The Extension Service of our Land-Grant Colleges has definitely proved itself the best qualified agency to carry out and conduct the educational work in connection with Federal farm programs affecting rural people. We urge that greater use be made of the Extension Service in coordinating the educational and informational work of the various programs designed for farmers and that adequate funds be provided or transferred to the Extension Service for the proper performance of those functions.

EMERGENCY FUNDS

6. The demands of war in the production field exact pressing calls upon our public services in many emergency activities.

We urge the Governor to survey the needs of our agricultural services as represented by the Extension Service, Experiment Station, and regulatory work and other departments of the University of Maryland with a view of supplying necessary emergency funds for strictly war needs.

DEFENSE ORGANIZATION

7. The Maryland Farm Bureau is heartily sympathetic with the efforts of our Government to meet production needs for our people and those associated with us in the prosecution of the war. In the attainment of this end, we believe that proper representation and the greatest efficiency should be practiced by our public agencies. We seriously question the policy of the Secretary of Agriculture in the appointment of the U.S.D.A. Defense boards, State and County, both from the standpoint of efficiency in action and especially from representation of farming interests. We believe that state authority should be recognized. We, therefore, urge that this important matter be taken up with our national officers and with the Secretary of Agriculture.

CROP ALLOTMENTS

8. We pledge all our aid to our Government in efforts to increase production of Dairy, Poultry, Vegetable and Pork products. To accomplish this effectively, we direct our officers to continue their effort to induce the Department of Agriculture to defer applying corn allotments to the State of Maryland, as corn is the basic grain and forage crop for producing these livestock products. This need is intensified by the short carry-over of forage due to drought conditions.

We further request the United States Department of Agriculture to make a careful study of all food and fibre production on which there has been curtailment to the end that increases can be made where it is found there is any possible need to further our all-out war effort.

DEFENSE BONDS

9. Farmers and Farm Organizations will spend their time and talents in all-out war effort. It is fitting and proper that they should invest their surplus earnings in "Defense Bonds". In this connection, we urge our leaders and members to consider this an important measure requiring immediate action.

COOPERATIVE DEVELOPMENT

10. We support the principles of cooperation in all fields and urge greater support to marketing, purchasing, consumer and health cooperatives.

We feel that in view of economy, distribution costs should be as low as possible and are highly in favor of the development of producer-consumer relations to affect that economy.

ECONOMY

11. The committee has two recommendations for consideration by the state and counties. We feel that state and county governments should curtail improvement programs to bare necessities during the period of war activity. Temporary prosperity is apt to stimulate new construction and improvements when costs are high. Curtailment of this will assist the war program by releasing labor and materials. Public improvements postponed until after defense and war demands decrease will be secured at lower costs and will provide work when employment is slack.

We further suggest that during war-time prosperity state and county governments should reduce and retire their outstanding debts. These governments will best serve their citizens and the nation by paying their debts now and planning for improvements when peace comes.

TIRE RATIONING

12. Because of the rationing of tires by the Federal Government, a large number of our County Agents and Home Demonstration Agents have already curtailed their travels and activities. In order to assure the success of our agricultural defense projects which depend so urgently upon these Agents, this organization shall take every reasonable measure to obtain prompt guarantees from the proper authorities that these Agents will receive adequate rations of tires to permit them to resume immediatly and continue their accustomed duties.

RESOLUTIONS OF THE ASSOCIATED WOMEN OF THE MARYLAND FARM BUREAU, INC.

We pledge anew our confidence in our President, Mrs. Edwin Fry, and other officers of the Associated Women of the Maryland Farm Bureau, Inc.

I. We urge all rural women to take an active part in both the agricultural and civilian war programs.

II. We strongly urge that intelligent and fair consideration be given to the deferment of farm boys where the facts clearly justify deferment.

III. We suggest that $300 of our treasury funds be invested in defense bonds.

IV. We recommend that the Maryland Farm Bureau continue its efforts toward the development of rural youth programs.

V. We recommend that the Maryland Farm Bureau women take an active part in garden projects and work toward furthering the nutrition and conservation programs.

VI. We wish to express our appreciation to all those who have participated in the program of our fourth annual convention.

ANNUAL MEETING OF THE MARYLAND AGRICULTURAL SOCIETY

Friday, January 9, 1942

MR. TURNER: We will now convene as representatives of the Maryland Agricultural Society. That is the organization set up by the Legislature in 1916. Its officers are the same as the Maryland Farm Bureau with one exception, the Treasurer is Dr. T. B. Symons.

We will now have the roll call.

Allegany: R. C. Wilson; *Anne Arundel*: W. P. Harrison; *Baltimore*: F. Ridgely Todd, G. Wm. Sattler; *Calvert*: Julius P. Parran, J. E. Morsell; *Carroll*: Edwin A. Englar, Jesse Hull, John D. Young; *Cecil*: D. B. McDowell, Harvey Simmers; *Charles*: S. C. Linton; *Dorchester*: A. R. Peterson; *Frederick*: T. S. Anderson; *Garrett*: Wm. Winterberg, David J. Humnel; *Harford*: T. Roy Brookes; *Howard*: Roby H. Mullinix, G. Cashell Nichols, Harry I. Musgrove; *Kent*: H. S. Leaverton, Frank O. Sutton; *Montgomery*: James D. King; *Prince George's*: J. E. McCue; *Queen Anne's*: Merton R. Shawn, R. T. Newell; *St. Mary's*: Frank Hayden, John Lee Abell; *Somerset*: Wm. T. Chaffey; *Talbot*: G. B. Rieman; *Washington*: R. C. F. Weagly, J. K. Funk; *Worcester*: S. O. Northam, L. D. Schockley; *Md. Ayrshire Breeders Assn.*: A. I. Bell; *Md. Coop. Milk Producers, Inc.*: DeWilton C. Parlett, C. M. Merryman, F. F. Hering; *Md. State Horticultural Society*: A. F. Vierheller; *Md. State Poultry Council*: H. H. Rieck; A. R. Peterson; *Md. Tobacco Growers Assn.*: T. W. Jones, Stanley Wilburn; *Md. Vegetable Growers Assn.*: Egbert Hawkins; *Assoc. Women of Md. Farm Bureau*: Mrs. Edwin D. Fry, Mrs. P. D. Brown, Mrs. Harry Williams, Mrs. R. C. Fisher, Mrs. Kieffer Funk, Mrs. Hudson Taylor, Mrs. Wm. Parker.

A quorum being present, the meeting is now open and I will ask Mr. Wise to read the call of the meeting and the minutes of the meeting

January 17, 1941.

December 17, 1941

TO COUNTY SECRETARIES AND
AFFILIATE AND ASSOCIATE SECRETARIES.

Notice of Annual Meeting of the Executive Council of the Maryland Agricultural Society

Dear Sir:

The annual meeting of the Executive Council of the Maryland Agricultural Society will be held January 9, 1942, at 11:00 a.m., Lord Baltimore Hotel, Baltimore, Md.

Blanks are enclosed for you to submit the credentials for the council members of your organization.

Very truly yours,
C. E. WISE, JR., Secretary
Maryland Agricultural Society

MR. TURNER: If there are no additions or alterations, we will declare these minutes accepted as read.

Dr. Symons will now present the Treasurer's report.

DR. SYMONS: Mr. President and members of the Maryland Agricultural Society, I would like to say we appreciate the resolutions that you have adopted this morning. We would like also to express our appreciation of the kindly interest and cooperation of the Farm Bureau.

Dr. Symons then presented the Treasurer's report as follows:

MARYLAND AGRICULTURAL SOCIETY
MARYLAND FARM BUREAU FEDERATION

FINANCIAL STATEMENT FOR FISCAL YEAR 1940–1941

Appropriation for 1940—1941 ..... $2,265.00

Expenditures:

Date		Payee	Classification	Expended
1940				
Nov.	8	James M. Gwin	Exhibit—Atlantic City	$55.46
	8	Md. Farm Bureau, Inc.	Off. Rent (Oct. & Nov.)	106.60
Dec.	17	L. C. Burns	Travel—(Nat. Grange)	34.21
	17	K. G. Connolly	Travel—(Amer. Farm Bur.)	11.70
	17	Paul D. Brown	Community Ex.	50.00
	17	Md. Farm Bureau, Inc.	Off. Rent (Dec.)	53.33
1941				
Jan.	8	Melvin W. Grimes	Community Ex.	25.00
	8	Md. Farm Burea, Inc.	Off. Rent (Jan.)	53.33
Feb.	20	Lawrence P. Batjer	Travel—(St. Hort. Meet.)	9.55
	20	K. J. Kadow	Travel—(St. Hort. Meet.)	23.00
	20	Oliver I. Snapp	Travel—(St. Hort. Meet.)	9.35
	20	H. W. Thurston, Jr.	Travel—(St. Hort. Meet.)	20.70
	20	K. G. Connolly	Travel—(Md. Farm Bureau)	5.65
	20	Mary W. Golden	Travel—(Md. Farm Bureau)	11.75
	20	Karl F. Reiblich	Travel—(Md. Farm Bureau)	7.00
Mar.	7	M. T. Johnson	Postage	65.00
	7	Md. Farm Bureau, Inc.	Off. Rent (Feb.)	53.33
	20	Anna Trentham	Community Ex.	12.50
	20	Md. Farm Bureau, Inc.	Off. Rent (Mar.)	53.33
Apr.	19	H. F. Winter	Travel—(Raspberry Meet.)	38.25
	19	Maryland Penitentiary	Ptg. (Grange An. Rpt.)	132.50
	19	Md. Farm Bureau, Inc.	Off. Rent (Apr.)	53.33
June	28	Peerless Photo-Eng. Corp.	Ptg. (Cuts for An. Rpt.)	8.88
	28	Md. Farm Bureau, Inc.	Off. Rent (May & June)	106.66
July	12	M. T. Johnson	Postage	60.00
	12	Peerless Photo-Eng. Corp.	Ptg. (Cuts for An. Rpt.)	5.72
	12	Md. Farm Bureau, Inc.	Off. Rent (July)	53.33
Aug.	14	20th Century Ptg. Co.	Ptg. Annual Report	992.81
	14	Md. Farm Bureau, Inc.	Off. Rent (Aug.)	53.33
Sept.	19	John A. Conover	Travel—(Community Meet.)	46.03
	19	Md. Farm Bureau, Inc.	Off. Rent (Sept.)	53.37

TOTAL APPROPRIATION $2,265.00

This account is audited by the State Auditor.

T. B. SYMONS,
Treasurer.

Mr. Young seconded the acceptance of the Treasurer's report and it was so accepted.

MR. BROOKES: Would it be proper at this time to move that the old officers be re-elected?

This motion was seconded and carried, and the following officers were re-elected: P. C. Turner, President; R. C. F. Weagly, Vice-President; C. E. Wise, Jr., Secretary and T. B. Symons, Treasurer.

MR. TURNER: I want to say that we all appreciate the wonderful cooperation from all over the State, and especially the wonderful turnout today. You have shown your interest, and I hope we will all work together in the coming year.

MR. WISE: I want to second what Mr. Turner has said. Thank you for your fine cooperation at a time when we need it more than ever. Let's keep up the good work and come back stronger than ever next year.

Adjournment.

MINUTES

OF THE

Fourth Annual Meeting Associated Women

MARYLAND FARM BUREAU, Inc.

January 7, 1942

The meeting, which was held in the Lord Baltimore Hotel, was called to order by Mrs. Edwin D. Fry, President, after which the Lord's Prayer was recited.

Mrs. Fry expressed regrets for the absence, due to accident, of Mrs. H. L. Davis, Secretary. She asked Mrs. L Leon Spicer to act as Secretary. She also read a letter from Mrs. Alice Hostetler expressing regrets that she could not be present.

Minutes of the last meeting were read and approved, and the Treasurer's report was approved.

President P. C. Turner, of the Maryland Farm Bureau, brought greetings, and C. E. Wise, Jr., Secretary, spoke to the group and urged the organization of more discussion groups.

Following Mrs. Fry's annual message, Mrs. Roy Bridger sang two selections.

The report of the Credential Committee was given by Mrs. Fulton, chairman.

Mrs. R. C. F. Weagly, National Vice-President, gave a report of her activities throughout the year.

The President appointed the following resolutions committee: Chairman, Mrs. C. J. Kern, Caroline Co.; Mrs. H. Dennis Reed, Harford Co.; Mrs. L. Leon Spicer, Dorchester Co.; Mrs. P. D. Brown, Charles Co.; Mrs. J. Kiefer Funk, Washington Co.

The following directors were nominated: District No. 1, Mrs. Harry L. Davis, Frederick Co.; District No. 2, Mrs. Edwin D. Fry, Montgomery Co.; District No. 3, Mrs. P. D. Brown, Charles Co.; District No. 4, Mrs. Atlee Armour, Cecil Co.; District No. 5, Mrs. Ford Adams, Talbot Co.; District No. 6, Mrs. Walter Langford, Dorchester Co.

The nominees were elected as directors, unanimously.

The following officers were elected unanimously by the directors for the coming year: Mrs. Edwin D. Fry, President; Mrs. C. J. Kern, Vice-President; Mrs. P. D. Brown, Secretary. The officers are the same as last year with the exception of secretary, Mrs. H. L. Davis having resigned.

The name of Mrs. Fry as director of District No. 2 was withdrawn and Mrs. Carroll Rinehart was nominated and elected.

Mrs. Ford Adams was nominated as representative to the Rural Women's Short Course. As she expressed doubt of her ability to attend, a motion was passed that final selection be left to the Board of Directors.

A motion was passed that a telegram be sent to Mrs. Harry L. Davis expressing appreciation of her 25 years of service.

It was moved, seconded and passed that the Associated Women of the Maryland Farm Bureau, Inc., contribute $25.00 for seeds for British Soil.

Mrs. Fry urged women to take courses that are offered in their respective communities in connection with Defense Programs, with particular reference to Red Cross, First Aid, and Home Nursing.

Mrs. Atlee Armour and Mrs. Pauline Blandford were elected to represent the Associated Women at the National Health Meeting in Washington, January 26, 1942.

Following a luncheon meeting, Mr. G. William Sattler of the Consumers' Cooperative Committee explained the Consumer Co-op Program in the State.

Mrs. Fry then presented the speakers taking part in a panel discussion on "Problems and Plans." Miss Venia M. Kellar, Assistant Director of the Extension Service, was leader of the discussion. Others taking part were: Miss Dorothy Emerson, Girls' 4-H Club Leader; Mrs. R. C. F. Weagly, Vice-President of the Associated Women of the National Farm Bureau and Chairman of the Women's Council of Defense in Washington County; and Miss Florence Williams, Home Demonstration Agent in Frederick County.

Following the panel discussion, Mrs. Fry reported attending a meeting of County Chairmen of the Women's Defense Council held in Baltimore on January 6. She said that the whole State showed an awareness of the big part women must play in this total war.

Mrs. Fry then presented some of the chairmen of various Defense Committees: Miss Edna McNaughton, as Chairman of Child Care;

Mrs. Cates, as Chairman of Speakers' Bureau; Mrs. Oscar Coblenz, as Chairman of Consumer-Producer Committee; and Mrs. Bartlett Johnson, as Chairman of Conservation.

MINUTES

OF

FOURTH ANNUAL CONFERENCE

OF

Maryland State Council of 4-H Clubs

January 7, 1942

George Lechlider, Montgomery County, presided at the fourth annual conference of Maryland State Council of 4-H Clubs.

At a business session a motion was approved that the Council buy an $18.75 Defense Bond and encourage each County Council to "Buy a Bond".

"Wake Up Young America" was the theme for a splendid challenge by Miss Dorothy Emerson, Girls' Club Agent, in which the closing thought was for Council members to "work and pray for the establishment of an international order in which the spirit of the Christ shall rule" and to WAKE UP, WORK AND PRAY that the "government of the people, by the people, and for the people, shall not perish from the earth".

A very forceful talk on "Your Contribution to National Defense" was presented by Miss Kellar, Assistant Director, Maryland Extension Service. She stated that the Pearl Harbor attack changed the educational, emotional, and economic patterns and cited many things which we can give up if we are going to help people who are less fortunate.

"What is expected of 4-H County Senior Councils" was the subject for a panel discussion by county extension agents, Rufus B. King, Leader, and discussed by Margaret Smith, Florence Williams, Margaret Loar, George Clendaniel, W. G. Myers, and Harry Beggs.

The following reports were given in the afternoon:

1. Miss Helen Bryan representing the National Youth Advisory Committee for Civilian Defense suggested various phases of volunteer service in local communities and urged "everything be done, regardless of race, creed or organization".

2. A summary of the Eastern Shore Camp held near Centerville, Maryland, with about 50 members in attendance, was given by Peggy Brohawn.

3. Approximately 75 members enjoyed the Western Shore Week-End Camp, and Reta Ryan accounted for the activities there.

4. Jerry Hardy, member of the Highway Educational Board, who enumerated objectives in the Safety Field brought about by war emergencies, said that "Accidents *now* can only be replaced by time—not money".

5. Mrs. Bartlett Johnston, State Chairman of Conservation, told of the work of the State Salvage Committee. She placed particular emphasis on the importance of saving rags, metal, paper, food, rubber, etc., and told the channels through which these must go to be used for defense.

6. Julia Kemp, who recently returned from a conference of the American Country Life Association at Nashville, Tennessee, gave a splendid report on their theme—"Youth and Democracy in the Rural Community".

7. Mr. Downey gave a complete summary of the Panel Discussion—"What is Expected of 4-H County Senior Councils".

It was suggested a State Goal for 1942 be adopted and the following Resolutions Committee was appointed: Doty Remsburg, Reta Ryan, Helen Bryan, Jackie Gaither, Julia Kemp and Herbert Frantz.

Daddy Jenks gave a closing message.

Respectfully submitted,

LEONA SPRECHER, Secretary

Maryland State Council of 4-H Clubs

PROCEEDINGS

OF THE

Maryland State Horticultural Society

FORTY-FOURTH ANNUAL MEETING

Y. M. C. A. Auditorium, Hagerstown, Maryland

January 5th and 6th, 1942

Meeting convened at 9:30 a.m. Invocation by Rev. Fesperman of Christ Reformed Church. Address of welcome by Mr. Holzapfel, Jr. An illustrated narrative of a tour covering the fruit sections of the United States was given by A. L. Schrader, University of Maryland.

Secretary-Treasurer A. F. Vierheller reported attendance at National Apple Institute convention where a Peach Merchandising Committee was formed. This Committee with Appalachian Apple Service, some sugar manufacturers, state extension services, and chain stores conducted a campaign "Peach Canning for Defense", during the peach season, which was very successful in aiding sales. It is planned to set up a National Peach Council to continue the peach sales promotion, following a conference at Richmond, Va., on November 12, 1941. He also reported a meeting of Maryland Horticultural Council, Baltimore, January 15, 1941, at which all horticultural interests of Maryland were represented. Some funds for peach disease investigations were obtained, but other items were rejected due to heavy demands on the State Budget. During the year, the Secretary had worked with other Horticultural Societies in matters of Wage-Hour laws for packing houses; reduction of freight rates on fruit; orchard labor problems; standardized apple boxes and elimination of many odd-sized containers in tariff schedules of Freight Container Bureau; joined with National Apple Institute in requesting that apples be given more specific mention in all nutrition publications of the U. S. Department of Agriculture. He also reported formation of special committee in the Department of Agriculture to work on apple problems.

The Treasurer's report showed a total balance of $362.94 on hand.

In his address, President Joseph G. Harrison stated; "During the past year we have experienced glutted markets, labor shortage, drouth, heavy damage from certain insects, all of which caused untold damage. We should forget what we have experienced for in 1942 we have the biggest job we have ever had. There will be sacrifice after sacrifice of both essential and non-essential things necessary for the smooth operation of the orchard and farm. We must plan every operation in advance and have the necessary materials on hand. We must help the war effort

by growing our usual fruit crop plus other crops considered essential to help feed our Allies. We should have firmly in mind that our one and only objective is to produce anything that will make quick work of the Axis."

WHAT CAN WE EXPECT IN GROWTH AND FRUITING OF OUR TREES IN 1942 AS A RESULT OF DROUTH AND HIGH TEMPERATURE IN THE FALL OF 1941?

F. P. CULLINAN, Principal Pomologist, Division of Fruit and Vegetable Crops and Diseases, U. S. Horticultural Station, Beltsville, Maryland

Let us go back to the year 1930 and see what happened following that drouth, which was one of the most serious in many years, and was rather general, extending from the Middle West to the eastern seaboard.

Observations in the growing season of 1931 showed that apple tree injury resulting from moisture shortage ranged from injury to one or two limbs to death of the tree. Dead areas were observed in the tops of trees, and injury was observed on roots 1/16 to 1/4 inch in diameter. In general, apple trees were injured more seriously than peach or cherry. The amount of injury seemed closely correlated with soil type, depth of soil, depth of rooting, soil management practices, and variety. On deep Hagerstown clay loam and chert soils the orchards suffered little. On the yellow and red soils and on black slate soils with little organic matter injury was more severe. Regardless of soil type, the *depth* of soil was all-important. Many trees on upland soils came through satisfactorily, while orchards on lowland soils, where the trees had developed a shallow root system, due to high water table, suffered considerably. Trees in mulched or cultivated orchards, or where the grass cover had been mowed and the organic-matter content was high, were less affected.

Of the apple varieties, Ben Davis was probably injured most and York least. Rome was also injured, particularly where the root system was shallow. Delicious, Jonathan, and Winesap were intermediate in degree of injury.

The drouth of 1930 did not seriously affect the amount of fruit produced in 1931. Apple trees bloomed heavily, and where in good condition, set and matured a good crop. Fruit buds were not seriously weakened, and there was an increase in the number of fruit buds formed. The peach crop in 1931 was the largest on record. This was partially because some trees bore a light crop in 1930. Good moisture conditions prevailed in 1931; the average rainfall was above normal. The size and quality of the fruit were more affected by the amount of fruit on the tree than by the tree's condition. Trees weakened by drouth in the previous season were less vigorous.

The years 1930 and 1941, were somewhat similar. The rainfall in 1941 was short in the same months. The drouth was not as widespread. In 1941 the early spring was dry, but good rains during June, July, and August in many sections were sufficient to carry the trees over the dry months that followed. The injury to trees was not apparent during the latter half of 1941. In studies at Beltsville on fruit growth of apples, there was no marked reduction in daily increase in fruit size, even though some of the trees appeared to be considerably wilted. On shallow soils, the trees may be weakened and injury may be serious. On deep soils, there is probably little injury. Peach trees have not been seriously affected. The acute period of the drouth occurred in September and October, after the peach crop had been harvested, and the trees went into the winter in good condition. Had heavy rains occurred before the trees were deeply in rest, they might have been more susceptible to winter injury. While the fruit buds and twigs are of small diameter on some of the peach varieties, there is no indication that they are less hardy. In freezing experiments at Beltsville during the winter, it appears that peach buds seemed as hardy as late in the winter of 1940-41.

The bud set on peaches will probably not be as great as in 1941, when all trees produced a heavy crop. Where trees have been weakened by the drouth, orchards should be given favorable cultural conditions during the coming season. Nitrogen should be applied early to keep the trees in good vigor. Areas that appear to be affected most by the dry weather should be mulched, or the sod should be broken up where this can be done without serious erosion. Peach trees that show by terminal growth that they were affected by the dry weather will respond to heavier pruning. In those orchards the cover crop should be turned under early so as to reduce moisture competition. Nitrogen should be applied at least three weeks before bloom to increase the set of fruit where the number of buds formed is rather small.

The drouth emphasizes the importance of selecting the proper site for orchards. We have had 3 years of severe drouth in the past 11 years. Where new orchards are to be planted, select a site with deep soil. Trees on shallow soils should be planted at greater distances.

WHAT PRICE LEVELS MEAN TO THE FRUIT INDUSTRY

R. B. CORBETT, Director
Maryland Agricultural Experiment Station

Great changes in prices affect all human relationships. This would not be true if all prices changed the same amount at the same time, but experience has shown that certain prices remain practically stationary while others either fall or rise very rapidly. It is these maladjustments that cause depressions affecting our whole economic structure and cause widespread bankruptcy at certain periods.

Probably no group in our whole economic structure is more interested in price levels and the maladjustments between various prices than is the fruit growers' group. A very large percentage of their capital is tied up in an orchard that is to be the main source of their income for from 30 to 50 years.

A brief review of the history of prices in the United States will show that prices rose very rapidly during each of the major wars through which this country has passed, reached a high peak, crashed downward, and after a short hesitation fell again. Each of these falls has been associated with one of the most severe depressions that this nation has known. The fall from the latter part of 1929 to the very low price period in 1933 is typical of these depressions, and, of course, the depression of 1929-1933 was one of the most severe that this country has experienced.

The effect of these falling prices was to make the fruit grower raise, pack and market three bushels of apples to pay off the same indebtedness that two bushels of apples would have paid off prior to this fall in prices. No one reduced debts at the same time that prices were being reduced, thus the fruit grower had in effect a 50 per cent increase in his debt burden. He had to stand the cost of producing, packing and marketing the extra bushel of apples from his meagre income. Debts are always difficult to repay, and under such conditions they are virtually impossible to repay. Many young men who have taken over orchards in recent years have had to meet this situation and have failed through no lack of ability on their part, but rather through a change in price level over which they had no control. Thus, changes in price levels and anything which will stabilize prices so that debts can be paid back on the same relationship to prices at which they were contracted are exceedingly important to successful fruit growers.

It is to be hoped that something can be done during the present war emergency and the period that follows to prevent drastic price fluctuations that will again attract persons into the fruit business, and later cause them to go bankrupt because of the impossible debt situation.

THE NATIONAL TREND IN APPLE VARIETIES DURING THE PAST TEN YEARS

Summary of Remarks

I. C. HAUT, Associate Professor of Horticulture, University of Maryland

Dr. Haut reviewed the national changes in apple varieties during the past 10 to 20 years, covering the major apple-growing regions. Particular emphasis was given the fact that tremendous increase in recent years of Delicious, McIntosh and certain other primarily dessert-type apples has added upward of 15 million bushels to the early winter market, to be moved largely in fresh fruit channels. This has added ma-

terially to the marketing problems. The production of early winter varieties will continue to increase for some time to come, despite some further decline in total production. This decline will continue to be at the expense, primarily, of late-keeping varieties and to a lesser extent, the summer varieties.

(This paper will be published in full at a later date and will be available from Department of Horticulture, University of Maryland.)

ROTATING THE APPLE AND PEACH ORCHARD

J. H. GOURLEY, Chairman, Horticultural Department,
Ohio State University, Columbus, Ohio.

There was a time when every encouragement was given to prolonging the life of an orchard. I could classify three waves of recommendation by horticulturists. First we advocated the planting of fruit trees and the rejuvenation of old ones (1908-1918).

Next we found ourselves willing to give advice but did not *advocate* new plantings (1918-1928). Finally, we were willing to give advice but definitely *discouraged* new plantings particularly by inexperienced and non-resident orchardists.

Economical production depends in considerable part upon yield per acre. Unless an apple orchard produces on an average 200 bushels per acre it is questionable whether the grower is more than breaking even, if that. Orchards, in general, produce more than previously. This is in part due to the elimination of farm orchards and uncared-for blocks, and also to the better production methods and varieties.

Most Productive Period. The New Hampshire Station made a study of the inventory value of apple trees[1].

(1) Woodworth, H. C. and G. F. Potter. 1940. Studies in economics of apple orcharding. N. H. Agr. Exp. Sta. Bull. 323.

They conclude that the peak of value per tree is $15.00 in the 23rd year. This value is a point where current income more than balances current expenses, and the high-yielding period of the orchard's life is immediately ahead.

The Michigan Station has also reported on costs and returns by age of trees[2]. The age groups of trees considered in 80 orchards were:—less than 15 years old; from 15 to 19 years old; from 20 to 29 years; and 30 years old or older.

The total yield of tree-run apples in 1935 was "lowest on the youngest group of orchards, highest in the group 15 to 19 years, about average on the group 20 to 29 years old, and relatively high on those 30 years old or more. Income per acre from apples in 1935 varied in about the same degree as the yield per acre, although the income was propor-

tionately lower on the oldest orchards in this study because of lower quality apples. Net return per acre above total cost was highest for the orchards 15 to 19 years old, and lowest for the orchards 30 years old and more."

(2) Wright, K. T. and W. R. O'Brien. 1937. Cost of producing apples in Berrien County, Michigan. Mich. Agr. Exp. Sta. Sp. Bull. 286.

Turning to a survey or estimate of the most profitable period of an orchard's life, we may examine a few figures collected by the Ohio Station[3]. Replies from 140 Ohio orchardists indicated that 49.6 per cent considered their apple orchards most productive in the 15 to 25 year age period, 20 per cent from 15 to 30 years, 25.2 per cent from 15 to 35 years, and 5.2 per cent from 15 to 40 years. Of this same group, 75 per cent considered their orchards to produce fruit most economically in the 15 to 25 year period, 15 per cent at 15 to 30 years, and 9.7 per cent at 15 to 35 years.

(3) C. W. Ellenwood. 1940. The optimum life of an apple orchard. The Ohio State Hort. Soc. Proc. 73rd Ann. Meet. 95-101.

A Growers' Poll. I asked several fruit growers at what age apple and peach orchards reached their economic optimum and should be removed. Replies from 7 Massachusetts growers averaged 40 to 45 years for apples, and 10 to 12 years for peaches. Two Connecticut growers gave 8 to 12 years as profitable peach tree life. One grower gave 40 years life expectancy on apple trees, planning to have 25% of acreage under 10 years and half of acreage under 25 years. Another grower considered 15 to 20 years the best age of apple trees, removing them at 35 to 40 years. A New Hampshire grower would remove Wagener apple at 20 years, Baldwin at 25 years, Wealthy at 30 years, and keep McIntosh as long as profitable. A New York grower felt he could not afford to remove apple trees to keep up with changes in demand. He has reduced from 108 varieties to 14 and cuts trees down to 25 per acre at 30 years of age, keeping tops of all trees to about 25 feet, removing trees at 40 years. He suggests planting 12½% of orchard each 5 years. A grower in Michigan reports more peach orchards removed before 15 years old, than after that age. He suggests removal of Spy, McIntosh and Jonathan at 40 years; Wagener, Duchess and Grimes at 30 years; Delicious under best care not over 40 years; Golden Delicious at 15 to 20 years; Baldwin and Greening 45 to 50 years. He judges trees on crop quality, not age alone. An Indiana grower would set peaches 25 feet apart and keep them for 15 years. He considers 35 years as the maximum for profitable apple trees. His cost per bushel of fruit from 40-year old Jonathan is twice that of 20 year old trees. Twenty to 32 years is the optimum time of profit and apple trees should come out at 40 years. Another Indiana grower figures a decline in apple trees after 25 years and peaches at 20 years. He finds best profits from young trees with high production. One Illinois grower stated that peach trees were most valuable at 5 or 6 years and should come out at 18 years of age.

His apple trees seemed most valuable at 12 years and were ready for pulling at 24 years.

Younger trees produce more economically, and some plan of planting rotation seems in order. Variety, location, soil, care, insect and disease problems should decide the life of an orchard. We cannot be afraid of change and still expect to have a profitable orchard.

OUR TREE REMOVAL PROGRAM IN RELATION TO OLD VARIETIES AND TO THE REPLANTING OF NEW VARIETIES IN BOTH PEACHES AND APPLES

R. S. MARSH, Head, Horticultural Department, West Virginia University, Morgantown, West Virginia.

Removal of uneconomic fruit trees from our producing commercial orchards is more essential now than ever before, even though such a program may reduce total yields slightly. Growers cannot afford to waste labor and materials and to wear out machinery on fruit trees that fail to pay for their keep. The interpretation of present apple prices and the hopeful prospect of future demand must not be misleading. Let us assume that Ben Davis sells for $1.00 per bushel instead of 65 cents, or Black Twig is bringing $1.25 instead of 90 cents; what is gained if you pay 40 cents an hour for labor, $50 per ton for nitrate or 15 cents a pound for lead arsenate? The Shenandoah-Cumberland Conference of 1939 designated Duchess, Winter Banana, Gano, Ben Davis, Black Twig, Baldwin, Maiden Blush, King David, and Stark for removal. Over-aged trees of any variety, orchards poorly located as to soil and to air drainage, and trees that have been crippled by weather, incurable diseases, and crowding, should come out. The total United States fruit production has been increasingly abundant in recent years and prospects for future crops indicate production ample to meet the anticipated war emergency requirements. Should future developments prove that fruit production is not sufficient, it would be more economic to supplement any shortage of fruit with the production of vegetables or of small fruits than it would be to depend upon "boarder fruit" trees. If your orchard has been profitable and the soil is apparently free from root rots, replanting can be recommended. This war may be a long one and the period of economic recovery even longer. Present good bearing orchards will not only be growing older but many of them may be injured by neglect due to shortages in labor, materials and machinery. Therefore, a young orchard of desirable varieties planted in the near future could be brought along with small expense and attention to the bearing age, when it would produce a quality and quantity of fruit very economically, compared to older competing trees. Location and soil have much to do with variety selection. In this particular locality the selection of Stayman, Delicious, and Gallia Beauty for the deeper fertile soils would seem advisable, while on the thinner, less fertile soils Jonathan and York could replace Stayman and Delicious in the chosen

list. The use of red sports such as Stamared, Richared, and Yorking is highly advisable on the deeper fertile soils. Nearness to a canning plant in this area obviously recommends the York. Rome blooms late in this locality making this variety highly acceptable. Also, Gallia Beauty, a Rome type, is an attractive apple.

The important yellow apple varieties, Transparent, Grimes, and Golden Delicious, cannot be generally recommended. These varieties must be adapted to locality, site, soil and to the orchard operator.

Lodi could be profitable in the hands of good Transparent apple producers. Turley, a fairly well-known variety, might replace Stayman where this variety is subject to severe cracking. Turley is not the quality of Stayman.

We still recommend Elberta regardless of its mediocre quality and its bud tenderness. Halehaven for the present should be chosen over South Haven, Eclipse, Hiley, July Elberta, Vedette, Valiant, Veteran, or any other variety ripening 10 to 15 days ahead of Elberta. For a ripening period of 25 to 30 days ahead of Elberta the Redhaven (yellow-fleshed) and the Raritan Rose (white-fleshed) show greatest promise. Any variety ripening later than Elberta should not be planted if the Oriental fruit moth is doing much damage in your locality. Gage Elberta may supplement standard Elberta if much trouble has been caused by *Bacterium pruni* or if a grower prefers a semi-dwarf tree. Growers must not lose sight of practices favoring soil fertility and conservation. We should avoid depletion of the soil and keep in mind the wise use of legumes, grasses, mulching material, manures, fertilizers, strip cropping, and contour plantings.

GROWER ORGANIZATION AS AFFECTING THE IMPROVED MARKET DEMAND FOR PEACHES

D. S. MATHESON, Associate Marketing Specialist, Department of Markets, Raleigh, North Carolina.

The necessity for some effective organization is evident when we examine statistics on peaches, as there are about 34,000,000 trees in the Southeast and Southwest, including about 10,000,000 new trees coming into production before 1945. It is apparent that the peach growers of this country are up against a real tough marketing job that is going to extend the stomach of the American public to the tune of probably 60 to 70 million bushels of peaches per ten-weeks season, or the stomach will not extend and the grower will lose money. That 70,000,000 bushel figure in an "on" year is not too high, for it is not improbable in 1944 and 1945 for North Carolina, Georgia and South Carolina to produce more than one-third of that, or around 25 million bushels of peaches. South Carolina has about five and one-half million trees alone and she is just getting into production, and will probably have a

10,000,000 bushel season before many years. You all realize the seriousness of the situation. Something can be done, and that something *must start from the grower.*

First of all, he must supply a quality product properly graded, packed and labeled. After the basic production effort he must trust to someone else to sell it for him. He can get together with a group of growers and all can contribute to the group effort a small part of their time or capital. With such an organization, great things can be accomplished through making the consumer aware of his product and increasing consumption. A cooperative effort has drawbacks from drones or active malcontents. Many cooperative efforts fail principally because the members of the cooperative are not completely sold on the effort and fail to really get behind it. The only time you can get wholehearted cooperation is when there is definite need for it. Grower organization can be effective only when the growers are sold on it and practically everyone cooperates. Each successful campaign has been based on the fundamentals of something the consumer needs or wants, presented to him in the way he wants it. The citrus industry spends more than $3,000,000 a year on cooperative sales promotion. California pays 7.5¢ per box for advertising alone; Florida, 1¢ on oranges, 3¢ on grapefruit and 5¢ on tangerines. Today the American public is consuming 63 pounds of citrus per person against 18 pounds in 1910. They could spend 10¢ per box and not get results if they did not regulate the quality and pack of the products they sell. Maine had slowly lost her potato markets and her growers were facing ruin. They got together and through grower pressure a standard package, grade and branding law was passed with 1¢ per barrel fee charged to growers for sales promotion. Today Maine, along with her competitor Idaho which does the same thing, enjoys preference in most markets and is constantly widening her distribution. Apple consumption per person was downward from 64 pounds per person in 1910 to 36 pounds in 1934. This disastrous trend forced apple growers into action in 1935 and 1936. Since then the decline in apple consumption has been definitely stopped and for the last four years apple consumption has averaged 42 pounds per person, and even with the loss of export markets the price to growers has risen from 69¢ in 1939 to 81¢ in 1940, to 98¢ up to December, 1941. Other factors enter into this picture, but principally the cooperation of growers in a sales promotion campaign backed by quality has definitely changed a trend that was about to wreck the apple industry.

The Georgia and Carolina Peach growers got together early in 1938 and formed the Georgia-Carolina Peach Marketing Association that functioned well for a time. In North Carolina in 1938 the outlook for the market on North Carolina Elbertas was very poor. The growers, through their Peach Society, signed up 95% of the North Carolina tonnage under a voluntary agreement not to ship any Elbertas under U. S. No. I Grade, 2-inch minimum. A request was made to the National

Association of Food Chains to assist in marketing them. The SMA was called in. Four thousand dollars were set aside for advertising. The basic necessity for any campaign was there—*quality*. SMA did not buy a peach. This worked fine for one season. The North Carolina growers known that cooperation paid in increased sales; but with short crops in the 1939 and 1940 seasons, they became disinterested and went into 1941 without any concerted program, and the season was the worst on record.

The weakness in that setup was lack of cooperation, in sales promotion as only 50 per cent of the growers in these 3 states signed up and paid into the sales promotion effort. After the 1941 season, grower organizations have gotten together and are ready now to ship fruit fit to eat and promote its sale. The various allied organizations, such as the U. S. Department of Agriculture, the state departments of agriculture, the land grant colleges through their extension services, the food chains, the trade organizations, sugar manufacturers, cereal processors and others are glad to help but growers must supply the necessary fundamentals without which the industry is facing ruin. The consumer will not eat immature or poor quality peaches. The Georgia Peach Growers Exchange have found they have more than they can handle alone. This organization handles about one-third of the Georgia crop, but their growers compete with shippers of immature, poorly-graded fruit; and, in the wild scramble to get their fruit off early, they are sometimes guilty of shipping poor fruit themselves. The best recommendation for grower cooperation is the actual testimony of growers who admitted lack of cooperation in the past and asked for forced cooperation through regulation in the future to save their industry. North Carolina feels the same way, and I feel that South Carolina will fall in line. The tremendous growth of serve-yourself fruit and vegetable buying, requires best-flavored and best-looking fruit. We must see that peaches are displayed prominently. The housewife must hear over the radio and see in her paper that peaches are here, delicious and beautiful. The future of the industry depends on her. The only one to see that this is done is the grower and he must band with other growers to get real results from any expenditure of advertising money.

WAXING OF APPLES FOR LONGER STORAGE LIFE AND IMPROVED SALE ON THE MARKET

C. W. Hitz, Assistant Horticulturist, University of Maryland.

Dr. Hitz described experiments with water-soluble wax as affecting storage life of apples. Using Golden Delicious and Grimes varieties, pre-ripened (allowed to develop yellow color) at 60°F., then waxed at various periods and placed in cold storage, he found less shrivelling of waxed apples. If not pre-ripened before waxing, more scald resulted. Date of harvest influenced the weight loss due to shrivelling, and August 30th seemed the best harvest date in these experiments. Waxing cost was about 1¢ per bushel.

(This work will be published as a Bulletin of Maryland Experiment Station and will be available by writing the Station at College Park, Md.)

NEW TRENDS IN METHODS AND PACKAGES TO MEET THE RETAIL DEMAND

EARL R. FRENCH, National Marketing Director, Atlantic Commission Company, New York, N. Y.

Most people today are inclined to talk about the war mainly in terms of guns and airplanes, battleships and tanks, which is perfectly natural because these are the dramatic weapons of the conflict in which we are now all engaged.

But we must not lose sight of the slogan that food will "win the war and write the peace." It is just as important to turn out supplies of food for this country and for Great Britain as it is to keep the wheels turning in the armaments factories.

We cannot assume that the job of supplying this food is going to be an easy one. We have the land resources for this job. The supply of farm labor is steadily dwindling, farmers have been warned that farm machinery, fertilizers, spray materials and other essentials will be hard to get.

Production and marketing must be more carefully planned than ever before.

The need for careful agricultural planning is of particular interest, because fruits and vegetables are an important source of the vitamins and minerals necessary for maintaing proper health—particularly necessary today in a period when war efforts are taxing the nation's physical strength and endurance to the utmost. And people generally aren't eating enough fruits and vegetables. More than a third of the total population are getting diets below the safety line for protection of health—partly because some consumers can't afford all of the right kinds of food they need, and because many people don't know what a good, balanced meal is. Thus, although living standards in Maryland are well above the national average, it is probable that thousands of men, women and children in this section of the country are regularly being served improperly balanced meals.

Nutrition experts of the United States Department of Agriculture have estimated the most acute diet deficiency of all is in fruits and vegetables. Consumption of green vegetables and fruits should be doubled, and consumption of tomatoes and citrus fruit boosted some 70 per cent, it is estimated.

The trouble is that many producers in this part of the country and elsewhere often don't get adequate returns for their present output. Action on several fronts can be taken. First, the public must be edu-

cated to a greater understanding of the nutritive values of fresh vegetables and fruits. Second, dependable volume sources of supply for properly graded and packed produce must be developed by growers. Third, it is essential that the distribution system for moving this area's farm products from producer to consumer be made more economical from beginning to end. The job of educating the American public to the importance of fruits and vegetables is a big one, so big that it can't be done by any one group. It requires the complete cooperation of all interested parties, and it seems to me that it's largely up to growers to initiate the needed cooperative action. Fortunately, promotional activities of growers' organizations during recent years have given the experience necessary for this type of work.

In past years, promotional work conducted by distributors at the request of growers has been mainly "emergency" work. It is possible to achieve excellent results through these "emergency" campaigns, the producer-consumer drives, but it is becoming more clear that advance planning for carefully conducted marketing programs can achieve even more beneficial results. A well planned, constructive marketing program would bring some startling results in boosting demand and consumption. In mapping such a program, growers will want to enlist the support of the whole distributive trade. If growers are to take full advantage of the opportunity offered them, there is need to develop adequate sources of supply. Growers are learning that it pays to make readily available a sufficient volume of products that are uniformly graded. Lack of standardization makes it difficult for buyers and sellers to conduct their transaction, and increases the cost of making sales. Many vegetables and fruits are still not properly identified as to size and quality. Growers are working together to improve their marketing programs, adjusting supply to better meet demand requirements, through improved grading and packing practices and marketing agreements in many parts of the country. Where group action of this kind is being worked out, it is enabling the small family-unit farms comprising the very backbone of agriculture to compete successfully with large growers—and is thus helping to protect their traditional independence. In many instances throughout the country, where a system has been developed for providing adequate volume sources of supply for properly graded produce, established standards have not been strictly observed by growers. This is particularly true in areas where produce is moved directly from growing areas by truck to retail stores. With regard to trends in packs and packages in produce marketing, fruit and vegetable growers are paying more attention to kind of packs that reduce damage and spoilage in transit from packing house to retail store. There have been many experiments in developing "consumer packs" for retailing fruits and vegetables. There has been considerably wider acceptance of standard packs. "Bulge packing," the practice of filling a container to over-flowing with fruits or vegetables, and then jamming the lid on, tremendously increases chances of bruising the produce in handling. Much produce is

dumped from truck to street to warehouse floor as many as eight or nine times on the way to the retail store from growing areas.

Produce that has been "bulge packed" is often transformed from U. S. Grade No. 1 to U. S. Grade No. 2 before reaching the retail counter, as a result of bruising. It has been found, that apples are less subject to spoilage when packed in boxes instead of baskets. Similarly, there has been a trend toward packing peaches in boxes instead of bushel baskets. Housewives like to see what they're getting. This has been the reason for development of cellophane "windows" in some packs, and mesh instead of solid paper or cloth bags for some commodities. As far as Maryland products are concerned, growers in this part of the country probably would do well to follow up and experiment with packaging trends that have been worked out in other areas. Few if any Maryland growers have adopted the box pack for peaches, and are still shipping in the bushel basket. It has been demonstrated that the box pack furnishes a more adequate protection against loss from damage and spoilage. Maryland growers probably would find it well worth their while to experiment with the two-pound consumer carton for apples and the mesh bag for this commodity as well.

The third fundamental factor is the need for increased efficiency all along the line in moving produce from growers to consumers. Improvements in transportation and refrigeration in the past 20 years have been outstanding. But, in spite of these notable advances, the entire produce marketing program is still encumbered by the old problem of inefficiency in distribution. During the past year or so, out of every dollar spent at retail for fresh fruits and vegetables, only 35 cents on the average has been going to the grower. The other 65 cents is eaten up by costs of distribution. Maryland produce growers get a larger-than-average share of the consumer dollar for their output, but this share amounts to no more than 40 cents—with the other 60 going to defray distribution costs. Thus, although consumers today are spending about $31,500,000 a year for Maryland-grown fresh fruits and vegetables, the growers get only about $12,600,000 of this total—assuming that about 10 per cent of fruits and vegetables grown in Maryland are canned, and the other 90 per cent sold in fresh form.

In round figures for the nation as a whole, American consumers are spending approximately $2,000,000,000 a year for fresh fruits and vegetables. But out of this total the farmers who grow the food get only about $700,000,000. Most produce sold commercially is handled and re-handled, passed from trade intermediary to trade intermediary, with extra costs and profits added on by each step and handling involved. Fruits and vegetables, under old-line methods, pass through from three or four to eight or nine intermediary steps before reaching the hands of consumers. Damage and spoilage losses are much too high in many instances because of extra cartage, unnecessary and careless handlings, slow movement through all the steps in the line, exposure to sun and too high or

too low temperature. It is the growers themselves, who must take the initiative in bringing about the needed "tightening up" of the distribution system, who must insist upon being provided with the marketing channels which will enable them to sell at a profit. By working closely with distributors equipped to handle volume lots economically, growers in many parts of the country have been able to develop marketing programs which bring them a share of the consumer's dollar much higher than the average. The records of my own company show how produce is being handled today by straight-line methods. We move heavy tonnages of fruits and vegetables directly from growing centers to company warehouses in towns and cities, and from warehouse to retail stores. This means two steps only are involved. Beyond this, the newest, most direct and effective method is the method of direct delivery, whereby fruits and vegetables are loaded onto trucks at growing areas and moved from there immediately to retail stores. This method has been streamlined at the retail end by development of the supermarket. These supermarkets, have reduced unit operating costs and achieved savings never realized before in store retailing.

Growers taking advantage of this direct farm to store delivery, are realizing a share of the consumer dollar ranging as high as 85 cents—a long way from the 35 cent national average. We cannot safely say that average price spreads can be reduced to the extent already achieved in some instances. But we can estimate that the growers' share of the consumer dollar for Maryland-grown vegetables and fruits could be boosted to at least 55 cents from the present level of about 40.

Thus, wider use of direct marketing can save 3 to 5 million dollars a year for producers and consumers of Maryland-grown fresh fruits and vegetables alone, and comparable sums for producers and consumers of many other foods grown in this area. I am going to suggest some requirements which are within the control of producers and the distributors they work with. 1. Create an enlarged demand for the products in question. 2. Offer a product which in quality, grade and pack will meet with ready consumer favor and competition from other similar products. 3. See that the products find their way into retail outlets and are displayed attractively. 4. Keep the products constantly in the trade outlets at all times during the season. 5. Utilize methods of distribution which will expedite the movement of the products and will place upon them minimum cost while traveling to the consumer. 6. Utilize means that will preserve the best quality and condition and will result in a minimum of loss through damage and deterioration. 7. Arrange for the giving of special promotional and merchandising attention to the products during times of heavy production and peak shipments. 8. Strengthen the producers' bargaining power, and protect the price structure by encouraging confidence and minimizing the fear of a loss with consequent stampede and dumping. This can be done through cooperation of producers themselves.

THE FERTILIZER QUESTION. ARE WE FEEDING THE TREE OR THE SOIL OR BOTH?

A. LEE SCHRADER, Pomologist, University of Maryland.

Dr. Schrader reviewed experimental work over past years, concerning use of various fertilizers on apple and peach trees, summarizing as follows: *Tree Feeding for Direct Use of Tree*—Apply under spread of tree and few feet beyond (except in orchards where roots occupy all area). Use: *Nitrogen fertilizers,* fall or spring. *Postash,* spring, followed by disk or plow. *Boron,* every 3 years, in spring. Apply boron or potash alone only where actual deficiency exists. *Manure mulch,* fall or spring. Same for *manure top-dressing. Mixed fertilizers* such as 10-6-4, fall or spring. *Soil Feeding for Indirect Benefit to Tree*—Apply over entire area of orchard with drill or broadcast by hand or machine. Use: *Mixed fertilizers* 4-12-4, 4-16-4, 3-12-6, at time of seeding cover crop or mixed fertilizers; 4-12-4, 4-16-4, 0-14-6 in spring or fall on sod orchards after disking. *Superphosphate* 20%, spring or fall on sod orchards after disking. *Tree and Soil Feeding for Older Trees*—Applied between tree rows or over entire area. Use: *Mixed fertilizer* 10-6-4 or 16-10-8, or *mulch* under trees or over entire area, or apply *manure top-dressing or single element fertilizers* using any of these materials in either fall or spring.

(This paper will be published in Maryland Fruit Grower or issued in mimeograph form and will be available at Department of Horticulture, University of Maryland, College Park, Md.)

CHANGING ORCHARD PRACTICES TO MEET THE LABOR SHORTAGES

STANLEY M. FULTON, Hancock, Maryland

We have been operating with as little labor as is consistent with good orchard practice. Some of the things I have done in the past year and plan to do in the coming year are: Divide our labor into two parts; first the labor we employ the year around; and, second, the harvest help. Most of my regular men are married, living in my tenant houses on the orchards.

I have been working on the theory that men and their families that are satisfied will be less inclined to move and will do their work better. I have improved my tenant houses, making them more comfortable and a home for the men, rather than just a house. I have painted, repaired the roofs and built new porches and where running water was available, a sink was put in and the water piped to the sink. One house was improved by putting on asbestos siding.

On one orchard, where help was difficult to get, I built two new houses. The houses are built with the idea of low maintenance cost. I used asbestos siding, concrete porches, and a 20 year roof. By extending the back porch a space could be provided for the car. With good houses to

offer men I have had more applications for work than I have had houses. I found last fall that women can do a lot of work in the field, if some thought is given to the problem. I found by having the women work on orchards with younger trees they are able to pick many more apples with the small sixfoot step ladders they use. In the packing house we use women to do work that men have always done before.

If the canners take as many apples as they did the past season, a great many apples can be handled this way enabling the grower to start a given variety earlier than can be done when color is a factor that spreads the harvest on each variety. Also, spot picking is eliminated, which enables a picker to pick more bushels per day. Selling to the canners also saves a great deal of packing house labor, as the fruit is taken directly from the orchard to the canning plant.

HENRY W. MILLER, JR., Paw Paw, West Virginia

The human element is still our biggest factor in apple production.

Labor is not only the most important factor in raising apples, but it also costs more than any other ingredient. The following figures are from the Consolidated Orchard Company's 1940 statement. In 1940 the crop was not nearly as large as 1941 and labor and materials not so high; however, it was about an average production and expense year.

Labor	$ 50,677.84	41.05%
Fruit Packages	26,525.60	21.48%
Misc'l. operating expenses (Repairs, fuel, auto exp. electricity, taxes, etc.)	20,979.02	17.00%
Administrative Expense (Salaries, Int. & Insurance)	15,449.29	12.51%
Fertilizer & Spray Material	9,830.97	07.96%
	$123,462.72	100.00%

The figures cover total cost of *producing, packing and storing* 180,000 bushels of apples, based on packed fruit, including bulk sold, figured at 50 pounds to the bushel. It cost us 68½¢ per bushel to produce, pack and store, of which 28¢ per bushel was labor. Management and labor *must* go hand in hand to bring satisfactory results. It is almost impossible to study one without including the other. Where there is *good management*, good employees are generally found and management, has a lot to do with the supply of labor in a given operation. Most of us underestimate the value of good management and consequently underpay it. The biggest trouble with most of the large operations in this area is cheap, inefficient management. A good manager or foreman is *cheap* on a high salary and the days of handling $50,000.00 apple crops with $50.00 a month management are gone. The scarcer the labor supply, the greater the need for good management. Good men like to work where there is good management, although they generally have

to work harder. The surest way to lose your best men is to keep an inefficient foreman or superintendent. If you have a good manager or foreman, take him into your confidence. Share your responsibility with him and share your *profits* with him. Let's worry less over the cost of either labor or management and remember the results obtained. A multitude of costs can be overcome with a clean apple crop. Trouble in getting and holding enough labor last year, may have been the fault of management. *Why* did certain growers have enough good help, while others in the same locality did not, where rates of pay and other working conditions were virtually the same? The key to securing and holding men is generally found in the hand of a resourceful manager. Orchard operations should be classified and performed according to their relative importance to production when help is scarce. When labor is plentiful, a good grower can usually complete all operations each year, but when labor is scarce, every operation should be performed in relation to its importance to production. For instance, in our orchards pruning is a Class A task. It should be done to produce a crop of good apples, so every other task at this time in our orchards is subordinated to pruning. Such jobs as painting buildings, cleaning fence rows and fixing roads must wait. They are in Class B and C. If pruning is finished before it is necessary to spray or the weather gets too rough for pruning, some of the Class B and C jobs will be done. If not, they will probably remain undone until labor is more plentiful. Every grower has his own ideas as to which operations are absolutely necessary. In making a crop preparation schedule for an orchard, I would suggest the following: *CLASS A*— Tasks absolutely necessary to growing good apples:—Repairing spray equipment, Pruning, Spraying, Sowing of nitrate and fertilizer, Thinning. *CLASS B*— Tasks that should be performed, but could wait if necessary:—Replanting, Budding and Grafting, Cultivation of young trees, Brush burning. *CLASS C*—Tasks a good grower likes to do, but which are not necessary to production:—Cleaning fence rows and hollows, Planting new orchards, Painting and repairing buildings (except roofs), Improving roads (Unless absolutely necessary), Erection of new buildings.

Such a schedule is drastic and would be a poor long-time policy. However, unusual problems take drastic remedies and so we must strip our decks to perform the one absolutely necessary battle of maintaining production throughout the War period. The suggestions are not a plan of retreat. I am subscribing to no defeatist stock. Apple production can and will be maintained throughout the War by hard work and good management in many orchards. The business is profitable and I propose to stay in it. In 1932, we adopted this *job classification plan* and it was closely followed throughout the early depression years. There was no scarcity of labor then, but there was a scarcity of money. It saved the life of our Company through that period and it will help preserve us again.

W. LEE ALLEN, Salisbury, Maryland.

Most fruit growers who are still in the business have already put into effect orchard practices which make for economy and efficiency. We are enumerating a few things in relation to the subject. We do not expect all of these suggestions to apply to any one situation, but some may be helpful to a few growers.

1. Cut out trees of unprofitable varieties, or trees on soils which will not produce profitable crops.

2. Overhaul sprayers and other orchard and packing house equipment during the winter to get it into good shape.

3. More efficient machinery will enable a given amount of labor to do more work.

4. In regions where clean cultivation is practiced, growers who have been considering the sod method could save considerable labor and expense of cultivation by starting it at this time. We have had about half of our apple orchards in sod for two to four years. All of the rest have been sown to grass and clover crops to establish sod this year.

5. There are times when trees which have produced a very heavy crop of fruit will have a very light crop of blossoms the following spring. Occasionally this crop is so light that it will not pay the grower to take care of it. Sprays are now available which would knock out these blossoms with one application without permanent injury to the trees.

6. In 1941, we had a very heavy crop of Transparent apples. We sprayed these just before the center buds opened with Elgetol at the rate of one quart per 100 gallons of water. This killed a large part of the blossoms. The crop originally was so heavy that we still had a lot of hand thinning to do but it cut the hand labor required for thinning. We add a warning that this is very risky business. It worked successfully for us on a large block of Transparent, but very disastrously on about 50 trees of Golden Delicious where we tried the same practice.

7. The use of hormone sprays to prevent dropping has been very common for the past two years. We recommend a continuance and enlargement of this practice both to hold the apples on until they get proper color and formation, and to spread out the time in which apples can be harvested, in case there is a shortage of pickers.

8. Most of the extra help at harvest time is transient labor. In 1941, for the first time, we employed women as well as men to pick fruit in the orchard and to help in the packing house. It may be necessary for growers to employ both men and women and to use a larger percentage of older men and boys than heretofore.

9. During the last few years some growers have had a lot of picking done by piece work. Reports have it that they get many more apples per

man picked than with day work, and the picking is done in a satisfactory manner where adequate supervision is given. We have not tried this practice but it may be one of the things which will be necessary.

10. We do not recommend any cutting down in the efficiency of spraying or the quality and amount of spray materials needed to grow a good crop. This is one place where growers cannot afford to economize. Thinking of it from the help angle, it will certainly be better to employ what help is available, handling fruit which runs with a high percentage of Number 1 grade than with poorer fruit caused by lack of thorough spraying with proper materials.

MEETING SOME PROBLEMS IN INSECT AND DISEASE CONTROL

Discussion led by Dr. C. Graham, Entomologist, University of Maryland, who stressed the following measures for codling moth control: Removal of split and broken branches where moths may over-winter. Clean old wounds, crotches, cracks and cavities. Burn all prunings. Scrape bark from trees in badly infested orchards, and band trees with chemically-treated bands before June 15. Remove old bands from trees during winter and burn the bands. Remove old boards, broken crates, baskets, sacks, etc. from the orchard to prevent insects from hiding under them. Screen packing houses and storage houses to prevent moths, which have hibernated there, from reaching the orchards for spring egg-laying. Either store all orchard field crates and baskets in a moth-tight storage for winter, or dip them in boiling water in early spring, to kill over-wintering moths.

WHAT ABOUT PEACH BORER CONTROL?

W. S. Hough, Virginia Agricultural Experiment Station,
Winchester, Virginia

As long as we have peach trees, we will have the borers to control. Control is best attempted in the fall, but, apple growers may be too busy with the apple harvest to consider control of the peach tree borer in early October. For this reason, it is natural that growers desire to use some material such as ethylene dichloride in late October or in November. Experience with ethylene dichloride during the past three seasons, however, has not been entirely favorable. Quite a number of cases of injury to the trees attributed to this treatment have been reported. Most of the trees which showed injury or died in Virginia orchards were located in rather heavy or tight soils. The safety of the treatment appeared to be influenced by the type of soil. Other factors which are believed to render the trees more susceptible to injury by ethylene dichloride are low vigor of trees, borer injury, separation of the emulsion before it is applied, pouring the emulsion on the tree trunk instead of on the ground. In view of the fact that the limits of safety of the ethylene dichloride treatment have not been definitely established in this area and also because availability of the material will likely be greatly restricted

in 1942, it does not seem probable that this treatment will be used by many peach growers this year.

PDB crystals applied in the fall and PDB dissolved in a miscible oil (oil of about 80 seconds viscosity) which is then diluted in water at the rate of 1 to 7 and sprayed on the soil around the tree trunk will constitute the materials for chemical control of this insect in 1942. It is necessary to mound the trees where either form of PDB treatment is used.

Growers who failed to treat their trees last fall may do so about May 1. Spring treatment may be less effective than fall treatment but, nevertheless, it is very much better than no treatment at all.

ARE SCALE INSECTS, RED MITE, AND MEALYBUG ON THE INCREASE?

W. S. HOUGH, Virginia Agricultural Experiment Station
Winchester, Virginia

Scale Insects

Scurfy scale.—Scale insects infesting apple and peach orchards usually come in cycles. We have a period in which a particular scale is abundant, and then it is reduced to the point where no commercial damage results for a number of years. At the present time, the scurfy-scale infestation in the Shenandoah Valley is waning, but it is increasing in certain orchards north of the Potomac. The scurfy scale has two generations annually. The second generation hatches in July. The mature females of this generation deposit the over-wintering eggs which give rise to the first generation in the spring.

The most practical time to control this insect is during the dormant or delayed dormant period. A minimum of 4% oil is required, and in severe infestations it is usually necessary to use 4% oil two seasons in succession in order to reduce the infestation to the point where it will not soon develop again. Three percent oil is not adequate, but when a dinitro chemical is added to 3% oil in the late dormant period, the result has been comparable to 4% oil alone. One gallon of Elgetol per 100 gallons without oil has also given results comparable to 4% oil in the dormant season. During the summer season, when the young crawlers are coming from the mother scales, it is possible to obtain effective control by the use of 2 quarts of summer oil emulsion and Black Leaf-155, 1½ pounds per 100 gallons. This combination must be applied two or three times in order to effect control.

San Jose scale.—This insect has been abundant for a number of years, and 2% oil thoroughly applied in the dormant or delayed dormant season will give adequate control unless the infestation is severe, in which case 3% to 4% oil is necessary. Lime sulfur at dormant strength, either in the dormant or delayed dormant season, will successfully control this insect.

Terrapin scale on peaches.—This insect appears to be on the increase in certain orchards where no dormant oil sprays have been used for a number of years. A minimum of 4% oil applied in the dormant season is necessary to give satisfactory control. Lime sulfur is not effective.

Red Mite

There are two species of mites infesting the orchards in the Cumberland-Shenandoah fruit area. The one is the European red mite which over-winters in the egg stage. The other is called a red spider and over-winters as a female mite hidden beneath loose bark. Last May and June, 1941, the red mite became very abundant in many orchards, and very severe damage appeared to be imminent. Fortunately, a combination of natural enemies and unfavorable weather in early July reduced the population of mites, and in many cases exterminated them so that the expected damage did not result in many orchards in July. On the other hand, foliage was bronzed in some orchards before the end of June. During the last two or three years, the mite problem has been increasing in importance throughout the Cumberland-Shenandoah fruit area. At the present time, however, the over-wintering population of red-mite eggs, as well as red spiders, is greatly reduced. Oil at 4% strength applied in March and early April is usually recommended for control of the red mite in the egg stage. The results are variable, but if the application is thorough it usually results in commercial control. The red spiders are not affected much by the dormant or delayed dormant sprays since the spray does not come in contact with the hibernating mites. Summer control of mites has consisted of an application of 6 quarts of summer oil emulsion in June before the mites become sufficiently abundant to bronze the leaves seriously. Sometimes two applications of summer oil are required. One difficulty about attempting to control the mites during the summer season is that growers usually are not aroused to take action against the mites until the population has increased to the point that foliage damage is conspicuous. Recently, we have obtained promising results with non-oil sprays for control of the mites during the summer season. These sprays consist of a salt of a dinitro chemical (DN-111) and rotenone bearing compounds (Neurote and NNOR). A dinitro dust (D-4) may also be effective, according to our preliminary tests.

Mealybug

Apparently Comstock's mealybug is spreading to additional apple orchards in some areas. In the Winchester area, seven orchards are now known to be infested. On the other hand, the infestations in the Roanoke and Crozet areas of Virginia experienced a marked decrease, beginning in October 1940. At that time, a fungus-disease spread rapidly among the mealybugs and was responsible for control of the insect in many orchards. A thorough cleaning of the trees during the dormant season constitutes about the most practical procedure against the insect. After the trees have been thoroughly cleaned, an application of oil or

lime sulfur, dormant strength, is helpful in destroying some of the eggs. During the summer season, a number of sprays have been used, but their effectiveness depends on quite a number of factors. The most widely used summer control at the present time consists of 2 quarts of miscible kerosene and 6 ounces of lorol thiocyanate applied in two or three sprays when the young of the second generation have left the egg masses.

OUR RESULTS WITH GROUND SPRAYING FOR SCAB CONTROL

A. B. GROVES, Virginia Agricultural Experiment Station

The fungus causing apple scab lives as an active parasite on the leaves and fruits during the growing season, and as a saprophyte in the dead, fallen leaves during the winter. A special type of spore develops within the old leaves during the late winter and these are ready to be discharged and carried back to the newly-developing fruit and foliage as growth is resumed in the spring. This period, when the fungus must necessarily leave its old, established position in the dead leaves and re-establish itself anew on living tissues, constitutes a vulnerable point for attack and it is at this point that the regular spray applications are directed. Fungicidal materials are applied to the newly developed fruit and foliage in order to prevent the spores, which are discharged from the old leaves during rains, from germinating and establishing the fungus again. The whole theory is one of protecting the new growth while allowing the spores in the old leaves to develop without molestation.

The possibility of attacking scab in the old leaves and thereby controlling the disease through the elimination of the source from which it comes was early recognized as a promising point of attack. The common sulfur and copper fungicides do not penetrate the leaf and are therefore ineffective against the fungus which is within the leaf. Penetrating materials were developed for late fall spraying but these applications frequently injured the buds and results against the scab fungus were not always consistent.

Two spray solutions have been used in Virginia, the first and most widely used being the sodium salt of dinitro-ortho-cresol (principally Elgetol) at the rate of 1-200, and to a lesser extent, sodium nitrate 100 pounds in 100 gallons plus 3 pounds mono-calcium arsenite. In both instances applications were made in the late dormant or delayed dormant period. Approximately 500 gallons was required to cover an acre, the spray being applied from two directions to insure the best possible coverage of the ground and turning of the leaves. A multi-nozzle broom was used, at pump pressure of 400 pounds. Applications were made during two seasons. From an experimental standpoint it was unfortunate that neither year was a scab year, and the results obtained were of little value. The general impressions of many investigators are briefly summarized here:

First, a properly applied ground spray will destroy the major portion of the ascospores in old leaves or prevent their formation. The effectiveness of the spray largely reflects the thoroughness of wetting of the leaves. Obviously, better results can be expected in a clean orchard than in one where there is a heavy cover of weeds, grass or remains of a cover crop.

Second, this reduction, or near elimination, of the scab spores will make the subsequent control of scab easier, but it *will not make it possible to safely eliminate any of the regular sprays.* Were the elimination of one or more scab sprays made possible, the over-all cost of the program would be reduced sufficiently to justify a more widespread consideration.

Third, the cost of the spray is too great to justify its general adoption. The material cost alone will approximate $5.00 per acre, the labor and equipment charges being additional.

Fourth, consideration of a ground spray is not justified unless a large number of the fallen leaves are affected with scab.

In final summary, it may be said that while ground sprays reasonably effective against over-wintering scab are now available, their cost and limitations of effectiveness seldom justify their use. Such a spray may be indicated, however, where a bad scab situation needs to be cleaned up, or where it is desired to reduce the scab threat to a point where a mild fungicide can be safely used through the critical early period on a scabby variety.

RESULTS WITH THE NEW SPEED SPRAYER

W. Lee Allen, Salisbury, Maryland

We have used one of the new Speed Sprayers for almost one full spraying season. In principle, there is one main difference between the Speed Sprayer and the standard spray rigs which we have been using. In the standard sprayers the spray solution is delivered to the nozzles under high pressure (400 to 600 lbs.) This pressure is the force which distributes the solution to the various parts of the trees. With the speed sprayer the spray solution is delivered to the nozzles under low pressure (30 to 40 lbs.) and the distribution is made by air currents formed by an airplane propeller mounted at the rear of the rig. We were well pleased with our results from its use.

1. We feel that we obtained a more thorough application with the outfit than we have ever been able to obtain with our standard sprayers. This refers particularly to getting the spray to the under sides of the leaves as well as the highest branches of our largest trees. 2. We could get as much spraying as with five or six of the other sprayers which we had been using. 3. This extra speed with the one outfit caused very con-

siderable saving in labor. Four men sprayed as many trees as 15 and sprayed them better. 4. We found it easy to regulate the amount of spray per tree. For instance, we used the outfit mostly on some 14-year-old apple trees which we felt should have about 10 gallons of spray solution per application. The driver of the tractor which pulled the sprayer was instructed to drive at a speed which would enable him to pass 100 trees while emptying the 500 gallon tank. With apples, the sprayer took one half of one row and with that speed we were delivering 10 gallons per tree. 5. In addition to getting satisfactory results in the way of disease and insect control, we had less mechanical injury than with the other sprayers. Golden Delicious is particularly susceptible to any form of irritation and russets much more easily than the other varieties. Our crop of about 8,000 bushels of this variety was sprayed entirely with the Speed Sprayer and with less russet than we have ever had on a crop of Golden Delicious before. 6. The Speed Sprayer is very easy to handle. We have been using Bean pump and sprayer outfits mounted on 1½ and 2 ton trucks. The Speed Sprayer mounted on two rubber tires will follow through thick places behind the tractor with much less injury to fruit and branches than with our other outfits. 7. There may be considerable economies in materials. When we first started with the Speed Sprayer we maintained a speed at which the sprayer seemed to be doing a thorough job. However, when we began to check up the actual amount of material used, we found it much less than we had been using on the same sized trees. We then slowed up the machine enough so that the same amount of material was applied on trees that we had been using. It was merely a question of whether or not to take the chance with the lighter application and we preferred not to take it.

From the above one might get the impression that the Speed Sprayer was too good to be true. We, therefore, want to list three or four things which might be on the unfavorable side. 1. The first cost represents a fairly large expenditure. The cost would not be as much as for standard equipment to do the same work, but a grower does not have the opportunity to try it out in a small way before going in for the full cost of a new machine. 2. While the machine is very fast, it is not as speedy as first thought. We believe it will replace five or six spray outfits in good condition. If we find that the lighter applications are sufficient to insure good results then it can be speeded up very materially. 3. With very small trees the Speed Sprayer may not be as economical with materials as the standard sprayers, although there are very sharp cut off valves which enable the operator to save material where there are missing trees. 4. In the one year's operation our Speed Sprayer gave us very little trouble. However, we consider one year too short a time to determine just what troubles may develop. On the favorable side in this respect is a report from Mr. Daugherty of Orlando, Florida who developed the machine, that he has used one of them for five or six years in spraying citrus fruits with very little mechanical trouble.

We think so much of our results with the one Speed Sprayer which we used in 1941 that we have bought another of them and expect to do all of our spraying of peaches and apples with the two Speed Sprayers in 1942.

THE JAPANESE BEETLE AND NEW RESULTS IN CONTROL MEASURES

GEORGE S. LANGFORD, Specialist in Insect Control
University of Maryland

The Department of Entomology, of the University of Maryland, is continuing its state-wide Japanese beetle retardation program in cooperation with the Bureau of Entomology and Plant Quarantine, of the U. S. Department of Agriculture, and the County Commissioners in all of the infested counties. Control work is based on a state-wide endeavor to establish disease and parasites in an attempt to obtain permanent relief or reduce the beetle to the status of an unimportant pest. The disease and parasite work is being supplemented with such practices as trapping, spraying, lawn treatments, and cultural practices.

Biological Control. In biological control work, the milky white disease is proving to be effective in reducing grub populations in treated areas. The University Laboratory has during the past two years produced over 30,000 pounds of spore dust. To date, the disease has been established on 21,758 properties covering 13, 481 acres involving 4,500 square-mile units. Field tests in Maryland show that the milky disease reduced the beetle population in fields actually treated, from 50 to 95 per cent in one year's time. In a number of the heavily infested counties as Cecil, Kent, parts of Harford, Baltimore and Queen Anne's, a reduction in beetle population has already been observed. Other parasites being used are two species of *Tiphia* wasps, and the nematode, *Neoplectana glaseri.* To date 489 colonies of parasites and over 100 colonies of nematodes have been colonized in the state.

The principal drawback to biological control is the fact that it is necessary to have heavy Japanese beetle populations before the diseases and parasites can thoroughly establish themselves.

Spraying. Up to the present, heavy Japanese beetle infestations have not existed in the main fruit-growing sections. However, within a few years the beetle will be causing real concern to many fruit growers. To date, no economical, practical spray has been found that is effective for killing any large number of beetles. Economical sprays are only efficient in repelling the beetle and protecting foliage. It has been found in experiments, on a small scale, that beetles will feed on certain poisoned mixtures containing honey, molasses, and other similar materials, but up to the present time the practical use of such sprays has not been demonstrated. The Department of Entomology has stressed research to improve the repellency of the effective arsenate of lead and the

semi-effective derris sprays. No improved stickers and spreaders have been found sufficiently superior to those now in use to advise their replacement. On apples, the amount of spraying needed to protect the foliage will depend in a large measure on the variety. There is a wide range of susceptibility to injury. Under conditions of heavy infestation unsprayed trees of such varieties as Yellow Transparent, Starr, Dutchess, and Delicious may have from 60 to 95 per cent of their foliage destroyed by the beetle, while other varieties like Cortland, McIntosh, York and Jonathan may have less than 30 per cent of their foliage destroyed.

In general, arsenate of lead is the most effective of the repellents, and used with wheat flour as a sticker two applications applied during the first and third weeks of July will reduce foliage loss to less than 2 per cent. Such late applications may require washing.

The last lead arsenate spray that can be applied safely and eliminate the possibility of washing is the first of July. It should give protection until about the middle of July. Where not practical to wash, and early apples are involved, two non-poisonous materials are recommended for protection. They are Derris (4 per cent) with some sticker as rosin residue emulsion, and hydrated lime. Neither of these materials is entirely effective. Two applications of either of these materials at ten-day intervals will give fair protection to the foliage of late apples. The derris spray is more effective than the lime spray. It is recommended that 4 pounds of derris, or 20 pounds of lime be used to 100 gallons of water. Lime used with addition of three pounds of aluminum sulphate makes the spray slightly more effective.

The foliage on early apples is much harder to protect. Derris spray is better for early apples, and late applications of lime leave an unsightly residue. From two to three sprays, depending upon the severity of the beetle infestation, may be required for adequate protection, these applications being at intervals of from 5 to 10 days. Derris spray (4 pounds of 4 per cent ground Derris root, 2 pounds of wheat flour, water 100 gallons) used in an experimental plot of Yellow Transparent trees during 1941 showed that unsprayed trees lost over 76 per cent of their foliage from beetles, while trees sprayed once lost approximately 15 per cent and trees sprayed twice lost only about 3 per cent. It is important that the apples be picked slightly on the green side.

Peaches that ripen in July and varieties that ripen earlier than Hiley, are subject to heavy feeding by the beetles. Growers will sustain heavy losses in spite of everything but control practices will give considerable relief. Derris sprays applied at the very first sign of infestation, tend to drive the beetles out of the orchard. Derris sprays at intervals of about six days are usually necessary, in addition to the usual wettable sulfur sprays. Three applications may be necessary. Substitution of lime for derris in the case of peaches is not satisfactory.

Early peaches should be picked slightly green. The beetle likes ripening fruit and cannot be satisfactorily repelled by any known spray.

Trapping. The past summer approximately 150,000 traps were operated in the state. Incomplete data show that 1,851 barrels or 111 tons of beetles were caught. Research in Maryland shows that an average of 1 trap to each acre of land will catch about 30 to 50 per cent of the total beetles produced on the farm. Normally, beetles will be found in greatest numbers in the vicinity of preferred hosts. Traps operated 5 to 10 feet from preferred host plants caught from two to two and one-half times as many beetles as traps operated 100 feet from hosts. The results of tests indicated that traps were not responsible for the large number of beetles on some properties and the relatively small numbers on others, but that this variation in population is due primarily to the kind and abundance of host plants.

Corn Planting Dates and Japanese Beetle Control: Cooperative work with the agronomy department over a four-year period shows that corn damage can be reduced by late planting. Last year 12 varieties and hybrids were tested. The planting dates were May 16 and June 10. The amount of damage varied with the variety. For the *early* planted corn the minimum grain loss from beetles was 21.5 per cent and the maximum was 40.6 per cent. For the *late* planted corn the minimum loss was 0 per cent and the maximum was 5.8 per cent.

COMMITTEE REPORTS

The Auditing Committee reported the Treasurer's books to be in good condition.

The Nominating Committee recommended the following list of officers for 1942, which was adopted unanimously:

President—Stanley M. Fulton, Hancock; First Vice-President—Dwight T. Walker, Mt. Airy; Second Vice-President—Lloyd Balderston, Colora; Secretary-Treasurer, A. F. Vierheller, College Park.

Executive Committee—R. S. Dillon, Jr., Hancock; A. Lee Schrader, College Park; O. R. Higgins, Hurlock; W. C. Main, Hagerstown; D. E. Rinehart, Smithsburg; E. C. McFadden, Hagerstown; S. B. Waddell, New Windsor; R. C. Shaw, Stewartstown; G. Rust Canby, Silver Spring.

Director to Maryland Farm Bureau—J. A. Cohill, Hancock.

Delegates to Maryland Farm Bureau—M. T. Heaps, Cardiff; E. D. McCain, Frederick.

Directors to Appalachian Apple Service—E. D. McCain, Frederick; W. T. Delaplaine, Frederick.

Resolutions were submitted and adopted as follows:

Requesting that sweet clover as a cover crop be included in Soil Conservation Program.

That the Society as a body, and every fruit grower do all humanly possible to aid our Government in defense of our country.

That the Society go on record as favoring national legislation in cull apple control and work actively in behalf of such legislation.

That the Society and members work actively with county agents, extension agents and growers in encouraging removal of fruit trees found marginal for any reason.

That a vote of thanks be given the speakers, officers, committees, University of Maryland extension and experimental staffs, commercial advertisers and exhibitors, the management of Alexander Hotel, Hagerstown city officials, Y.M.C.A. management and the Secretary of the Society for their efforts toward the success of the meetings.

That, realizing our loss of a loyal member and true friend, in the death of Philip H. Gold, the Society extend sympathy to the family of the deceased and make this resolution a part of the records of the Society.

Adjournment

REPORT

OF THE

THIRTY-FIFTH ANNUAL MEETING

OF THE

Maryland Crop Improvement Association

Baltimore, Maryland

January 7, 1942

In order to conserve paper which is needed in our war effort, the subjects discussed in the annual meeting are presented here in a summarized form. James Galbreath presided.

IMPORTANCE OF LADINO CLOVER IN MARYLAND AGRICULTURE

By SAM GRAY, Northeast Manager, American Potash Institute, Inc.

For many years northeastern agriculture has been handicapped because of the lack of a reasonably permanent hay-type legume. Ladino, a comparatively new grass land crop, appears destined to place our agriculture in this region on a par with the more favorable alfalfa growing regions farther west. It is a triple purpose crop, most excellent for pasture, hay, and silage. It is permanent on well adapted soils under favorable conditions of fertility and management. Ladino is a promising legume for Maryland livestock farms and we may expect to see and hear much about it in the next few years.

Ladino is a giant type of white clover, in contrast to the smaller types such as common white Dutch, English wild white, and native wild white clovers. It was introduced into this country from northern Italy around 1890. The first official record of experiments with this crop are recorded in Bulletin 98 (1894) from the North Carolina Agricultural Experiment Station. Seed for commercial plantings were imported in 1903 and used chiefly on irrigated land in southern Idaho from which state our first commercial seed supply was developed. Oregon, Washington and more recently California have further developed the crop and seed supply which today provides seeds for our rapidly increasing acreage.

Dating from 1928, when John Ellis of Lee, Massachusetts, made the first field planting of Ladino clover in the northeastern region, the acreage of this crop has increased from four acres in that year to an estimated acreage at the present time of more than 100,000 in the 13 northeastern states. A recent survey of the agronomists in this area indicates that the acreage planted to this crop may be greatly increased and that within a reasonable time it may even exceed a million acres. In Maryland alone, with the present acreage being somewhere around 1,000, it is estimated that it may be profitably expanded up to 20,000 to 25,000 for straight seeding and possibly 60,000 acres additional to thicken stands of pasture and pasture legume mixtures.

Like the wild white and white Dutch clovers, Ladino spreads by means of runners which take root at the joints to form new plants. It is distinguished from ordinary white clover by having much larger leaflets and taller stems. Owing to its more erect habit of growth it is able to compete with tall growing grasses and legumes. It is not so well adapted to closely grazed pasture sods as the smaller types but with favorable management and liberal fertilization will persist over a period of years. It is a true perennial and should prove a boon to grass land farming in the northeastern United States.

As a pasture plant, Ladino appears to be at the top among the legumes in palability both for dairy animals and chickens. It has been definitely established, however, that it will not stand the close, continuous grazing usually practiced on the ordinary white clover, blue grass sod. Successful grazing of this crop requires rotational management, pasturing fairly heavily then removing the stock when there are several inches of the top still remaining. This is to permit full recovery. It is important to let the plant go into winter with at least 5 to 6 inches of top growth. A light application of from 5 to 6 tons of well-rotted manure applied in late fall or early winter has been found very helpful in preventing winter killing.

Ladino makes excellent hay that is relished by all classes of livestock. In harvesting for hay, care must be exercised in handling to prevent shattering of the leaves. The crop should be mown when about one-tenth of the flower heads have turned brown. The first cutting, which is ready about June 1, has a moisture content often as high as 82%. For this reason and because of the possibility of unfavorable weather this early crop might well go into the silo. The experience of most growers is that in ensiling from 60 to 80 pounds of molasses per ton of silage should be used to best preserve this feed and to increase its palatability.

Ladino clover is a high producer and a heavy feeder. It is a good crop to be grown on good land. It thrives best on the moist, low-land areas of the farm, those normally too wet for corn or alfalfa yet sufficiently well drained to prevent standing water. While recommendations for fertilization vary in the different states, it is generally agreed that to produce the maximum yields the soil should be limed to around pH 6.0 and liberally supplied with phosphorus and potash.

In the preparation of soils for Ladino the same seeding practices used in the seeding of ordinary clover grass mixtures are followed. Most agronomists

recommend the plowing down of from 8 to 10 tons of manure. If seeded in a grass mixture, a complete fertilizer is usually recommended. Where seeded in pure stands or in a legume mixture, a phosphorus potash analysis is believed best. Analyses recommended and chiefly used in the New England states are: 4-16-20 and 0-20-20. Similar ratios are quite generally recommended in the Middle Atlantic States. In New Jersey, for example, the recommendations call for the use of from 400 to 500 pounds per acre of a 5-10-10 fertilizer for Ladino-grass seedings and where seeded with alfalfa or red clover mixture 800 pounds of a 0-12-12. The University of Maryland Agricultural Experiment Station suggests from 300 to 800 pounds per acre of a 0-14-6 or 0-12-12, depending upon the natural fertility of the soil and whether or not manure has been plowed down. The higher potash analysis is to be preferred on the poorer or lighter textured soils where little or no manure is used.

The most satisfactory time of seeding Ladino is in the spring with a companion crop of oats and it should be planted as soon as the ground can be worked. Successful seeding, however, has been made in August and early September without a companion crop and also in March or April on stands of fall-sown grains or timothy. Whatever the method of seeding, the companion crop should be pastured early or made into silage. As Ladino seeds are small in size best results follow shallow seeding. It is a common practice to broadcast on top of the ground and to press the seed into the soil lightly by use of a roller. Ordinarily, from one to two pounds of seed added to a seeding mixture of grasses and other legumes is recommended. Even for the seeding of pure stands of Ladino very satisfactory results may be expected from the use of from 2 to 4 pounds per acre provided a nurse-crop is used to control the weeds. Once started the vigorous, spreading habit of Ladino soon completely covers the surface.

A small acreage of Ladino pasturage on every dairy farm to supply most of the grazing is a capital investment. Where there is some supplemental grazing from old pastures, from one-fourth to one-half acre of Ladino pasture per cow may be ample. However, as the carrying capacity of the clover may vary considerably with the season, age of the stand, or fertility conditions, dairymen might well figure on one acre for each cow for a grazing period of 160 days. Early grazing should begin when the plants are from 3 to 4 inches high. Quite frequently as many as 8 or 10 cows per acre at weekly intervals may be necessary at this season of the year to make the most economical use of the herbage. The use of portable electric fences for dividing the Ladino pasture has been found to be an essential part of the management program. This or some other system of dividing the field will be found necessary in order to prevent excessive grazing and to insure maximum utilization of the feed produced.

Young Ladino clover is laxative and animals may lose flesh when grazing on it unless they are gradually accustomed to it. To guard against this as well as bloat which may result if animals stuff themselves on clover they should be pretty well filled up on hay before being turned out and for the first few weeks of grazing allowed to graze only about 15 minutes at any one time. The time of grazing may be lengthened gradually and alternated wherever possible

between Ladino and permanent grass pasture. Such a grazing program insures a high level of milk production, reduces the need for concentrates and keeps the cost of production of milk at a minimum. No dairy farmer in Maryland can afford to ignore the possibilities of Ladino clover.

PUTTING LADINO CLOVER TO WORK ON A DAIRY FARM

WILBUR BARKDOLL, Master Farmer of Pennsylvania

Mr. Barkdoll is owner and operator of Forest Vu farm located eight miles north of the Mason-Dixon line in Franklin County, Pennsylvania. Franklin County is adjacent to Washington County, Maryland. He has been working rather closely with members of the Agronomy staff of Pennsylvania State College in his farm crop operations.

Mr. Barkdoll showed a series of color slides of Ladino clover in use on his farm, discussing these pictures as they were shown. Some of the important points brought out in his discussion follow.

Forest Vu farm is heavily stocked, having 50 to 60 head of dairy cattle on 88 acres. This land is limed regularly at rates slightly higher than the minimum required for good growth. The farm is divided into approximately 10-acre fields and two rotations are used. The first is a three-year rotation: corn, wheat, and pasture. The pasture mixture used is 14 pounds of Orchard grass, 12 pounds of alfalfa and 1 pound of Ladino per acre. This is seeded around April 1st on the wheat. This pasture is grazed both the year wheat is cut and the following year.

The second is a five year rotation: corn, wheat, and three years of alfalfa. Alfalfa is seeded on the wheat in early spring at the rate of 18 lbs. per acre. In both of these rotations Mr. Barkdoll seeds 3 pecks of wheat per acre. He feels that this lighter seeding gives the grasses and legumes a better chance to make good start and yet does not decrease the yield of wheat obtained.

As would be expected, all of the farm is manured heavily. Records kept in 1939 show that 789 loads of manure were spread on the farm that year. With this heavy manuring the standard practice is to apply 200 pounds of 20% superphosphate per acre on corn, wheat, and alfalfa.

For grazing, the 10 acre lot of Ladino clover, Orchard grass, and alfalfa is divided into five 2-acre lots by use of an electric fence. When the pasture is a foot or more tall, he turns the cattle in to graze. The cows spend about a week on each block, grazing only a few hours daily, as this is all the time needed for them to get their fill. When the cows are full and begin to lie down to rest, they are removed to a lot which is kept for resting. Most of the droppings are left on this lot. Having the cows on the pasture only while they are grazing makes far better utilization of the herbage, as little is lost by trampling or because of droppings.

An important advantage of this mixture is the fact that if in a good season the growth is heavier than needed for pasturage, the excess can be made into hay of excellent quality.

Ladino clover is not ordinarily used on Forest Vu farm for ensilage as the yield per acre would be much smaller than corn used for ensilage. With the intensive system of farming followed on this farm, crops which yield a maximum amount per acre must be used.

Experience on Forest Vu has shown that Ladino clover seeded in pure alfalfa stands may tend to crowd out the alfalfa while mixtures in which grasses, alfalfa, and Ladino clover are used seem to keep a better balance between the Ladino clover and other plants in the mixture.

EXPERIENCES WITH LADINO CLOVER IN MARYLAND

HARRY DEVOE, Manager of Indian Spring Farm, Harford County, Md.

I planted 54 acres of Ladino clover in 1939. The field was in alfalfa for two years previous to seeding Ladino. About March 1, 1939, the alfalfa was harrowed with a spring tooth harrow and 2 pounds per acre of Ladino and 4 pounds of timothy were seeded. The Ladino did not appear to make much progress during 1939, but in the spring of 1940 it was the most beautiful field I have ever seen. It was grazed very heavily by 240 head of cattle which cut the clover down almost too close to the ground. In the fall I rotated the pasture. In the spring of 1941 it again made a heavy growth. Due to severe drought the Ladino didn't make as good growth in 1941 as the year before. However, we got over 5,000 lbs. per acre of dry grass off of this pasture in 1941. Due to heavy grazing the stand has thinned out considerably. I noticed that the Ladino has seeded heavily during 1941 and believe it will come back and thicken up in 1942.

From 1934 to 1940 the field received 10 tons of barnyard manure per acre in the winter; 2,000 lbs. per acre of ground limestone was applied in 1937. In the spring of 1941, 500 lbs. per acre of an 0-20-0 was applied. At the present time I am top-dressing the field with a light application of manure and expect to use some 0-12-12 or 0-14-6 in the spring.

LLOYD BALDERSTON, Cecil County, Md.

I followed Mr. DeVoe's methods rather closely. In the spring of 1939 I seeded a mixture of 20 lbs. of alfalfa and 1 lb. of Ladino clover per acre on barley. The alfalfa largely disappeared following the first cutting in the spring of 1940. I divided the 12-acre field into two 6-acre plots. During 1940 I had 40 to 45 head of cattle on this pasture for over 3 months. I thought it was undoubtedly the finest pasture crop on the farm during the months of August and September when we were short of other pasture. During 1941 this Ladino was cut on June 19 and ensiled. When the growth came back, it was pastured. Due to the drought I was not able to get more than half of the pasture obtained, in 1940. I feel that I have a potash problem on this field. I have limed it and expect to put some potash and phosphate on it before spring. The total yield of hay-dry material on this pasture was 7,741 lbs. per acre this year.

EDWIN WARFIELD, Howard County, Maryland.

Two years ago we had an old meadow which was rather wet. We ditched, plowed, and limed it and sowed barley in the fall. Orchard grass was seeded

with this barley. A seeding of 1 lb. of Ladino clover and 10 lbs. of Korean espedeza was made in the spring. We had a heavy growth of Orchard grass and Ladino which proved quite palatable. Much of the same procedure was followed on another bottom land field of 30 acres. Especially fine Ladino clover resulted. Although we had a dry spell in 1941 the Ladino made good growth.

We have been using a combination of orchard grass and alfalfa for hay for a number of years. After hearing Mr. Barkdoll it seems to me worthwhile to try some Ladino in this mixture.

JOSEPH FRANCE, Harford County, Maryland.

I have been successful in growing Ladino clover but made the mistake of trying to cut a pure stand of Ladino for hay. It never cured so that I could get it in. Unless it is growing in mixture with grass it is a mistake to try to make hay out of it.

PRODUCING MAXIMUM YIELDS OF CORN

R. G. ROTHGEB, Agronomy Department, University of Maryland

Regardless of the necessity for quotas or other quantity controls, low cost per unit of product can always be defended. It is desirable to grow corn at a low cost per bushel on whatever acreage is used. Moreover, the present shortage of labor still further emphasizes the necessity for eliminating all lost motion in the growing of corn, Maryland's most productive feed-grain and silage crop. Although production methods may be well established by experience, it is often possible to make minor changes that will prove profitable. The farmer who is quick to see and adopt changes appropriate to his farm is the one who succeeds. In the following paragraphs several of the more important considerations in corn growing are discussed with the hope that Maryland corn growers may be induced to check up on their present routines.

Choice of Seed

This item should be disposed of during the winter or spring months when outside work is not pressing. Putting off until planting time the chore of ordering or preparing seed is likely to result in loss in yield at harvest time. Delayed orders find desirable seed stocks exhausted. Procrastination in selecting and testing home-grown seed may cause the omission of this important chore with the resultant inferior stands in the field. Maximum yields can be obtained only from uniform, sound seed capable of producing vigorous seedlings. Whether the seed is hybrid or open pollinated and whether it is home-grown or purchased, it should be heavy, well-matured, free from disease symptoms, and well-graded. Too often in the selection of home-grown seed the emphasis is put on fine points relative to size and shape of seed ear and kernels rather than on the more important points associated with soundness and viability.

The question of hybrid corn versus local open-pollinated varieties has been before us for several years. In localities for which suitable hybrids have been established, hybrid corn has been proved definitely superior with regard

to standability and productivity. From start to finish, hybrid corn has had to demonstrate its superiority. It has been more thoroughly tested than any crop type yet introduced to the farmers. In most states, including Maryland, scientifically planned and widely distributed field tests have subjected this new type of corn to unbiased comparisons with the old local open-pollinated strains. In the Maryland tests almost all hybrids have stood up better in storms than has any open-pollinated variety. The more sturdy hybrids, such as U. S. 13, have averaged about one-eighth as many down plants as the best open-pollinated strains. Many farmers figure the superior standability of hybrids is worth the extra cost of seed.

Yield results are no less impressive. For the last four years in every replicated test conducted by the Maryland Experiment Station the highest yield per acre in terms of dry shelled grain has been made by a hybrid. Likewise, hybrids have been first in most farm trials. U. S. 13 and similar hybrids have had consistently good records in central and eastern Maryland. This cross has given an average increase of 8 bushels per acre or 13 per cent above its nearest open-pollinated competitor in 14 official tests conducted during the last 3 years.

On the basis of all information gathered to date it seems safe to conclude that commercial hybrids are available which, on the average, can be counted upon to out-yield good local strains by 10 to 15 per cent over the greater part of the state. The evidence at hand indicates that the superiority holds for both grain and silage.

It should be pointed out that there are parts of the state, for example, the high altitudes of the western counties, where hybrids have not been impressive. Likewise, at lower elevations in the central and eastern parts of the state the proper hybrid for all situations has not been found. In such cases, it is advisable to use established sorts.

Very few mistakes will be made in the choice of a hybrid for a particular farm if attention is given to the following requirements.

1. A good record for three or more years in official experiment station tests.
2. A good performance for one or more years on nearby farms.
3. Availability of properly produced, sound, well-processed seed.
4. Suitability as to type or use to which the crop is to be put. (Univ. of Md. Dept. of Agronomy Mimeograph No. 2 gives descriptions of hybrids having good performance records.)

Time of Planting

Corn is a warm weather crop. It requires comparatively high temperatures throughout its growth period. When germination takes place in soils that are below 55° F in temperature, the young seedlings make very slow growth and for that reason usually suffer much injury from seedling diseases. Efficient corn production, therefore, requires that planting not only be delayed until there is little danger of killing frost, but also until the soil has warmed up

sufficiently to permit rapid growth of the seedlings. For most parts of the state this will mean waiting 14 to 18 days after the average date for the last killing frost. Provided allowance is made for some variation from place to place the corn planting period should start as follows: Tidewater areas immediately adjacent to the Chesapeake Bay, the last week in April; other areas in the Coastal Plain, the first week in May; Piedmont Maryland or the area extending from the base of the Catoctin Mountain eastward to the Coastal Plain, the second week in May; the Hagerstown Valley, the third week in May; the mountainous counties of Allegany and Garrett, May 10 to June 10 depending upon elevation.

In all except the short season areas of the state, the planting can be extended over a period of ten days to two weeks from the initial date without danger of seriously affecting yields. Delay beyond this period may expose the crop to frost damage in the fall. Even though there is no frost damage, late planted crops, as a rule, do not yield as well as full season crops.

In areas where Japanese beetles are present in numbers great enough to reduce corn yield by as much as 10 per cent, late planting is thought advisable. The object is to have the corn silk after the beetle population has diminished. In Harford and Cecil Counties this means that silking should not take place before August 10. To accomplish this end the length of the growing season required by the corn being planted must be taken into consideration. Because of the danger of frost damage in the fall, short to medium season sorts are preferred. A very good representative of the short season group is Iowa hybrid 939 and of the medium season group, U. S. hybrid 13. In order to escape serious beetle damage the former should be planted June 10-15; the latter June 5-10.

Rate and Method of Planting

There is no one best rate of planting for all conditions and varieties. In general, the smaller the fodder and the more favorable the conditions for growth, the thicker the stand can be without undue reduction in the size of stalks and ears. The variety to be grown, the use of the crop, together with the productive level of the field are to be considered in determining rate of planting. If the crop is to be used for grain the aim is to use a rate that, with average rainfall, will give a maximum yield of shelled grain on ears of marketable size. If the crop is to be used for silage, the size of ear is not of much importance so long as total energy per acre is not diminished. Thus, silage corn is usually planted thicker than corn for grain.

Ordinarily, drilling at comparatively heavy rates is perferred when the crop is to be used for silage. On the other hand, when the crop is to be used for grain and cut by hand, many farmers prefer planting in hills. From the standpoint of weed control hilled corn checked both ways is to be preferred on fields where a good job of checking can be done. On hilly land and on land capable of supporting thick stands, drilling is the more desirable method.

The plan of planting an excess of seed and thinning to two plants per hill in hills 42 x 42 inches has been used extensively. This method provides approxi-

mately 7,100 plants per acre. Experimental evidence indicates that it pays to plant in excess of the above figure on the more productive corn land. Moreover, hybrids can be planted somewhat thicker than open-pollinated varieties of similar type. It has been demonstrated also that thinning may be eliminated provided attention is given to the following details: Use of high quality, well graded, treated seed in the right amount; use of proper planter plates; proper land preparation; planting at the right time. Although good quality seed may be used, only 70 to 80 per cent of the kernels planted can be expected to produce mature plants. Therefore, it is necessary to plant in excess of the stand desired. Since the stand of plants may vary appreciably with little effect on yield, seed losses need not be anticipated accurately.

With the above facts as a basis, the following rates of planting are suggested for medium to full season hybrid corn. Obviously, any such table must be more or less arbitrary. Other rates and arrangements may be entirely satisfactory.

Expected yield	Method of Planting	Kernel drop	Spacing in inches Hills	Rows	Kernels required per acre*
20– 35 bu.	Hilled	2	42	42	7,100
20– 35 bu.	Drilled	1	18–21	42	8,300–7,100
35– 50 bu.	Hilled	3	42	42	10,600
35– 50 bu.	Drilled	1	12–14	42	12,400–10,600
50– 70 bu.	Hilled	4	42	42	14,200
50– 70 bu.	Hilled	2	19–21	42	15,700–14,200
50– 70 bu.	Drilled	1	10–11	42	14,900–13,600
70–100 bu.	Hilled	3	36	36	14,500
70–100 bu.	Hilled	2	18	36	19,400
70–100 bu.	Drilled	1	9	36	19,400

* Depending upon hybrid and grade, seed varies from 1200 to 1600 kernels per pound.

Fertilizer on Corn

The story of fertilizer on corn is long and involved. Only a few of the more outstanding generalities can be mentioned here. Each field is, more or less, a separate and distinct problem that requires specific consideration for best results. Observation as to crop responses in the past, knowledge of the soil and previous fertility treatments, together with soil tests are necessary for the most intelligent recommendations. Good farming requires that the soil fertility be maintained at a level that will permit profitable production throughout a long period of years. Therefore, applications of fertilizers, lime, and manure should have reference to the whole rotation as well as to each crop in the rotation.

The best information at hand indicates that fertilizer is applied to more than half the corn acreage in Maryland. The figure for manure seems to be somewhat smaller. In central Maryland, especially, it is customary for many farmers to withhold fertilizer when manured sod land is plowed for corn. In parts of the state where the supply of manure is limited and where the soil leaches

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readily, it is necessary to use fertilizer in order to obtain a satisfactory crop. In the Coastal Plain area fertilizer is definitely needed on corn, but the great variations in soil texture, drainage, organic matter content, and water-holding capacity of the soil make general recommendations of questionable value. As a rule, the coarse textured soils of this area require fertilizer with a higher nitrogen and potash content than soils of central and western Maryland. A broadcast application of 200-500 pounds per acre of 3-12-6 is often given as a basic recommendation for light soils.

In the Piedmont and Limestone Valley areas, fine textured, well-drained soils prevail. It is here, in conjunction with general and livestock farming, that most of Maryland's best corn crops are produced. Even though yields are relatively high and much manure is available, experience shows that, even in this area, profitable increases in yield of corn can be obtained by the judicious use of commercial fertilizer. Not only does fertilizer increase yields but, if the proper analysis is used, maturity is hastened and the quality of the crop is improved. Basic recommendations are as follows: With little or no manure, (1) 2-12-6 broadcast before planting at the rate of 200-400 pounds per acre; (2) 2-12-6 put on with a fertilizer attachment for the planter in continuous bands along the row at the rate of 150-300 pounds per acre; (3) 2-12-6 hill dropped in side bands at the rate of 100-200 pounds per acre. With medium to heavy applications of manure 0-14-6, or possibly superphosphate alone may be substituted for 2–12–6 at planting time or put on top of the soil and plowed under with the manure.

In conclusion, it should be pointed out that the effective utilization of the fertilizer depends largely on an adequate supply of lime in the soil as well as upon an adequate supply of moisture.

SILAGE SUBSTITUTES FOR CORN

W. B. KEMP, Head, Agronomy Department, University of Maryland

The material presented in Dr. Kemp's talk has been published in Department of Agronomy, Mimeo. 16, entitled "Silage Substitutes for Corn," therefore, it is not included in this report. A copy of this mimeo. may be obtained by writing to the Agronomy Dept., College Park, Maryland.

Following this talk several Maryland farmers talked on experiences with substitute crops for corn.

JOSEPH FRANCE, Harford County, Md.

I planted soybeans and Hegari sorghum after barley, also cowpeas and Sudan grass. I had a reasonable crop, 10 tons per acre from the cowpea-Sudan grass mixture, and 5 tons per acre from the soybean-sorghum mixture. In handling these crops I used what I call a "Doodle Bug." It is a buck rake on the back of a second hand car. We put a load on the rake by backing down the windrow then hoisted it to a 45° angle and drove to the cutter, backed up and dumped the load and pulled away.

VERE CULVER, Manager, Mount Ararat Farm, Cecil County, Md.

I had 29 acres in soybeans and Atlas sorghum. I used an all-crop harvester and got 480 tons of green silage. We cut the crop and loaded into wagons holding 3½ tons each. We were about 70 hours harvesting and putting this in the silo. The labor cost was 30 cents a ton.

JAMES GALBREATH, Harford County, Md.

I have been growing soybean-sorghum silage for 3 years and am enthusiastic about it. It is hard on the grain binder, but it saves labor enough to justify it, providing the sorghum does not grow any taller than 6 feet. The past season was very dry and the mixture made only half normal growth. In the past I have grown soybeans and sorghum after barley. During 1941, they were planted after wheat. When soybeans and sorghum follow barley, you can usually get them planted in June; following wheat the earliest possible planting is usually from July 5 to 15th. Under conditions on our farm this mixture produces more tonnage than corn planted at these late dates. In 1940, I had Amber sorghum and it grew 8 or 9 feet tall. Where the Hegari variety is planted, 20 lbs. of sorghum and 6 pecks of Wilson beans, after a grain crop it will not get too tall for harvesting with a binder.

We mixed the soybeans and sorghum on the barn floor and put it in the drill, a bucketful at the time, aiming to get just enough to make one round drilling.

This soybean-sorghum made the most palatable silage we ever had. There was no difference in the production of cows when we changed from corn to soybean-sorghum silage. In putting it in the silo we got no seepage even when following closely behind the binder. We also had no trouble from spoilage.

WM. POWEL, Manager, Doughoregan Manor Farms, Ellicott City, Md.

I have grown soybeans and millet in mixture and had good success harvesting them with a binder. In 1941 I seeded a mixture of soybeans and sorghum. Even though I used Hegari sorghum it got 7 feet or taller. I was unable to harvest with a binder so used a mower. After the mixture was cut we had trouble handling it because it tangled badly.

REPORT
OF THE
THIRTY-THIRD ANNUAL MEETING
OF THE
Maryland State Beekeepers Association
State Armory, Cumberland, Maryland
January 10, 1942.

President HAROLD L. KELLY, of Forest Glen, Presided.

After a few brief remarks regarding the probable role to be played by bee culture in the war effort, President Kelly called on Robert Easter of Baltimore who described investigations conducted in his apiary tending to show that the common daddy longlegs is a serious predator of bee colonies. He said that colony morale apparently is seriously interfered with when guard bees are eliminated and he indicated that further investigations will be conducted.

A. D. Hiett of the G. B. Lewis Company and H. J. Carey of the A. I. Root Company spoke informally on activities of beekeepers in the South and called upon Maryland beekeepers to help in the war effort by producing all the honey and wax possible.

Professor Roger Burdette of the University of Maryland department of economics discussed the factors which make for success in beekeeping. His discussion was based on results of a survey made in 1939. He pointed out the value of the two-story hive body, good combs, prolific stock, and the necessity for beekeepers to know their local nectar secreting flora and blooming dates.

At the close of the morning session, the beekeepers inspected the commercial exhibits set up by Messrs. Carey, Hiett, and John Lindner in the basement.

At the afternoon session, the members were welcomed by a representative of the Mayor of Cumberland. L. B. Shearman of Glenarm responded for the Association.

Dr. L. M. Bertholf of Western Maryland College gave an extremely interesting address, describing the day to day duties of the adult worker bee from the time it emerges from the cell until death.

E. J. Anderson, Pennsylvania State Apiarist, spoke on the composition and properties of honey. He was followed by Dr. C. E. Burnside of the U. S. Bee Culture Laboratory, who described the symptoms and treatment of American foulbrood.

Election of officers was postponed until the Spring meeting. After adjournment the group went to the basement, where the commercial exhibits were located. President Kelly announced the winners in the annual sweepstakes and presented the awards.

REPORT

OF THE

Maryland Vegetable Growers Association

TWENTY-THIRD ANNUAL MEETING

Wednesday, January 7, 1942

Baltimore, Maryland

The twenty-third annual meeting was called to order by President H. J. W. Rayner, who called upon Herman Hunter to lead a discussion on the topic, "What's New in Vegetable Varieties?"

C. E. Cox reported that the most recent tomato disease control development has been the introduction of the wilt-resistant Pan American tomato by the United States Department of Agriculture.

It was compared with Rutgers and Brown Special varieties on soils heavily infested with fusarium wilt in Caroline County. Final stands were as follows: Pan American 90.7%, Rutgers 73.8%, Brown Special 56.9%. Yields: Pan American 2.93 tons per acre, Rutgers 3.73 tons per acre, and Brown's Special 1.07 tons per acre. On a smaller plot heavily fertilized Pan American yielded 18.54 tons per acre. The quality of the Pan American tomato is excellent, it is free from cracks and has a good, even color. It is a valuable tomato for planting on soils severely infested with fusarium wilt. Seed has been distributed to commercial seed growers for trial and increase.

Bean blight has been very severe in portions of the State this year. County Agents should warn bean growers of the risks involved in planting cheap seed of questionable origin. Fields grown from Idaho seed have usually been free from blight.

Thousands of seedling cantaloupes have been tested for resistance to wilt. Finally one plant was found which resisted the disease and it is hoped that suitable cantaloupe varieties resistant to wilt can be developed from the progeny of this plant.

As a result of 1941 experiments, together with the results during the past five years, it is our opinion that the Sequoia potato is the best late potato variety for planting in Maryland.

Advantages of the Sequoia potato: For five years it has out-yielded any other potato variety in tests; the vines are resistant to late blight and to injury

from flea beetles and leaf hoppers; good stands and yields can be obtained at low elevations with seed kept in Garrett County until June or July; tests in 1941 have shown it to be drought resistant; it is white and round with shallow eyes.

Disadvantages of the Sequoia potato: The tubers are susceptible to late blight; it has a tendency to produce large hollow tubers, but this can be partially overcome by closer planting.

Quite a large quantity of certified Sequoia seed is available in Garrett County and a little in Howard County. Information in regard to amount of seed available can be obtained from the county agents of these counties.

In heavy soil where tubers are likely to blight, the Sebago is recommended as a late variety. Sebago tubers and tops are resistant to blight, but the tops are susceptible to injury from leaf hopper. Certified Sebago seed can be obtained in Maine and a small quantity in Garrett County.

Irish Cobbler is still recommended as the best early variety.

By replacing the Rurals and Dakota Red varieties with Sequoia, using only certified seed and thoroughly spraying the vines, the 2% increase in potato production set as a goal for Maryland can be obtained with but little increase in potato acreage.

A new seedling with tops as resistant to late blight and insect injury as Sequoia and with tubers more resistant to late blight rot than Sequoia has been developed and studied in cooperation with the United States Department of Agriculture. In Garrett County, where late blight and insect injury were severe, a yield of 200 bushels per acre of U. S. No. 1 potatoes was obtained from this seedling without spraying the vines.

R. G. Rothgeb in discussing "What is New in Sweet Corn" gave the following report.

More than 100 different sweet corn stocks were tested by the Maryland Experiment Station in 1941. Of this number, perhaps one half could be called new. Unless, however, they have been introduced to the trade and have shown some promise in Maryland, they need not be mentioned at this time.

Market gardeners and home gardeners have always been interested in early varieties. Unfortunately, short season corn usually gives relatively poor yields, especially at the lower altitudes in Maryland. This statement holds for both open pollinated varieties and hybrids. For corn which ordinarily matures in less than 72 days there is nothing really satisfactory for this area. The following yellow hybrids have the best records for this maturity class: Marcross 6.13, Seneca Golden, and Earligold.

The medium early group (75-80 days) is far more satisfactory. Golden Cross Bantam, the most valuable hybrid yet produced, belongs in this class. The latter has been used extensively in Maryland for both market garden and canning purposes. Today it serves as a standard of comparison. Although it

has a number of competitors, it is not in serious danger of replacement. Ioana is a new rival which has some advantage from the standpoint of field vigor and productivity under adverse conditions. Tri-state is a new hybrid which has possibilities. It is slightly later than Golden Cross Bantam and has taller fodder and larger ears.

There is a medium-late yellow hybrid worthy of mention. Aristogold No. 2 is five to six days later than Golden Cross Bantam, grows about two feet taller, bears much larger ears, and produces a greater tonnage. Despite its size and rather unrefined appearance, raw kernels seem fairly satisfactory for flavor and tenderness. This hybrid appears to have possibilities where the market demands a large yellow ear.

In the medium-late white group (82-90 days) should be mentioned Evergreen Hybrid A and Evergreen Hybrid 14x5. Both have good quality ears of the Evergreen type.

In the Country Gentleman group, Iogent 27 is outstanding for size and productivity. However, the coarseness and shallowness of the kernels are detracting features. Although somewhat less productive, Illinois Country Gentleman Hybrid 8x6 is more conventional as to kernel type.

H. A. Hunter reported that:

A number of early and second early varieties of sweet peas have been developed which yield about as well as Alaska. Most of these were developed for canning or freezing, but might be used for the fresh market, also. The varieties mentioned below have given the best results over a period of years in tests at the Ridgely Sub-Station. Mardelah is a small-seeded sweet variety not more than a day later than Alaska. Its season conflicts with Alaska and its yield has not been quite as good. Glacier and Dark Podded Thomas Laxton are large-seeded, high-yielding varieties recommended for freezing and two to three days later than Alaska. Laxton's Cropper is about four days later than Alaska, and has yielded high among the canning types. Pride is used more than any other sweet variety in this area. It yields well in the average season and comes off five to seven days later than Alaska. Canner King is a variety of excellent quality, but it is two to three days later than Pride and in hot, dry seasons may be a failure.

E. P. Walls reported tests of ten varieties of edible soybeans. All varieties were quite productive. The soybeans are high in protein, and since their yield is considerably higher than peas, it was suggested that they might have an important place in the home garden as well as for commercial canning.

H. P. Smalley, representing the American Fertilizer Association, reported that there was a good prospect that ample fertilizer supplies would be available and that the price while somewhat higher, should not be unreasonable. America has plenty of raw products and plant capacity for its manufacture. Immense quantities of sulphate of ammonia is resulting as a by-product from the greatly expanded capacity for steel production.

One bottleneck may be transportation. Phosphate rock formerly moved by boat must now be moved largely by railroad. The food program is so important that the government will make every effort to see that the needs of farmers for fertilizers are supplied.

Since Baltimore is one of the largest producing areas in the world, Maryland farmers should be in a preferred position. The government is taking 2/3 of the burlap so that other forms of bags for fertilizer may be necessitated. It now looks like some sort of bags will be available. The question of tires for truck transportation has not been worked out but probably will be by spring. Farmers were urged to order early and to get their fertilizer into their barns so as to be on the safe side.

VEGETABLE INSECT CONTROL

By C. GRAHAM

Mexican Bean Beetle—For best control of the Mexican bean beetle use a ¾% rotenone dust, or a spray made with 3 lbs. of 4% rotenone dust to 100 gallons of water and apply this to the beans when the first eggs begin to hatch into the little yellow larva. Another spray may be necessary 10 days later.

Asparagus Beetle—Dust the field as often as the population of beetles indicate that it is necessary. Use a ¾% rotenone dust or a spray made with 3 lbs. of 4% rotenone to each 100 gallons of water. Another method is to leave a few shoots throughout the field uncut for attracting the beetles and spray or dust these shoots with rotenone.

Cabbage Aphis—When the aphis first begins to appear, dust the cabbage with a ¾% rotenone dust, or spray with a mixture of 3 lbs. of a 4% rotenone dust to each 100 gallons of water, or dust with a 3% nicotine dust, or spray using 1 pint of nicotine sulphate plus a little soap to each 100 gallons of water.

Cucumber and Cantaloupe Aphis—When the aphis first begins to appear, dust with a 3% nicotine dust using a 30 ft. apron, or spray with a mixture of 1 pint of nicotine sulphate plus a little soap to each 100 gallons of water also using a 30 ft. apron. Pyrethrum is also very effective and should be used according to the manufacturer's directions.

Striped and Spotted Cucumber Beetle—Plant a surplus of seed and when the beetles first begin to appear dust with a ¾% rotenone dust, or with calcium arsenate 1 part and gypsum 15 parts.

Flea Beetles on Egg plants—When the beetles first begin to appear on the plants, dust with a ¾% rotenone dust, or a 3% nicotine dust, or spray using 3 lbs. of a 4% rotenone dust plus a little soap to each 100 gallons of spray. Three or four applications may be necessary.

Squash Vine Borer—There are no practical control measures for the commercial grower, but in home gardens the procedure is to locate the point in the vine where the borer has entered, slice the vine, remove the borer and cover

the place of attack with loose soil—burn all vines after harvest. Partial control can also be obtained by frequent use of a ¾% rotenone dust applied under the foliage and around the base of the plant and on the vines.

Squash Stink Bug—Partial control can be obtained by dusting the underside of the leaves with a ¾% rotenone dust or a 3% nicotine dust. Many of the bugs can also be killed by placing pieces of boards or burlap sacks around the vines and killing the bugs that congregate beneath them. It is also advisable to smash the yellow egg masses that will be found located on the underside of the leaves.

Tomato Horn Worm—On tomatoes that are to be canned a dust containing 1 lb. of calcium arsenate and 3 lbs. of lime can be used up to within a week of picking time. ¾% rotenone dust is partially effective if applied to the tomatoes when the worms are quite small. Regardless of the type of dust or spray used, it should be applied when the worms are first noticed in the field.

Corn Earworm on Tomatoes and Beans—The most effective control has been obtained by use of a dust mixture containing 60 lbs. of cryolite and 40 lbs. of talc or sulphur. This should be applied to tomatoes when the worms are first noticed and to beans as soon as the pods are set. Calcium arsenate spray or dust is also effective.

Pea Aphid—Use a spray containing 3 lbs. of 4% rotenone dust plus a spreader to each 100 gallons of water. Start spraying the peas when the first aphids appear. Use from 125 to 150 gallons per acre and apply with a pressure of from 500 to 600 lbs. or use a ¾% derris dust applied at the rate of from 30 to 45 lbs. per acre. Apply this material when the wind velocity is quite low. Such periods usually occur late in the afternoon or at night and early in the morning.

Nicotine dust and sprays give good pea aphid control when used under the proper conditions. The dust should contain 3% nicotine and should be applied when the temperature is above 70° F. It is necessary to use an apron in order to obtain satisfactory results. A nicotine spray containing from 1½ to 2 pints of nicotine sulphate plus a little soap will also give fair results when applied under the right conditions.

Corn Earworm—Fair control of the corn earworm can be obtained on sweet corn by use of a white mineral oil plus dichloroethyl-ether. The mixture is injected into the silk of the ears with a plunger type oil can in from 4 to 5 days after silking starts. From 0.6 to 0.8 CC of the material is used per ear. For further information on this method of control of the corn earworm on sweet corn, write to the Department of Entomology, University of Maryland, College Park, Maryland.

AFTERNOON SESSION

The afternoon session was held under the auspices of the Horticultural Council which represents all the horticultural interests of the state. F. Ridgely Todd, presided. Director R. B. Corbett, of the Maryland Agricultural Ex-

periment Station, in opening the discussion on marketing, emphasized the fact that the cost of production had gone down whereas the cost of distribution had gone up.

Mr. Crow (in place of Dr. F. V. Waugh, U. S. D. A.) discussed the subject "Terminal Markets, Grading, and Price Problems Under War Conditions." The problem, as he outlined it, is to produce and to distribute more food with the same equipment and with less labor. What is needed is to produce in the right places and in the right quantities and to cut the waste in marketing. Half of the cost to the consumer occurs from the city line to the consumer, and this cost can be cut 20%, as found by actual studies by the United States Department of Agriculture. More efficiency in the city market is necessary. Change can be made either by regulation or by change in equipment and physical set-up, or by both. All grades are needed and a market for each grade should be cultivated. As to prices, keep the market spread down, and the transportation facilities up.

The address by Russell C. Hawes, Marketing Specialist, University of Maryland, on the subject "Marketing During The Glut Periods" is to be published in the Transactions of the Peninsula Horticultural Society.

Mr. Todd, chairman, emphasized the need for more work of the kind Mr. Hawes was doing on the Baltimore market and asked growers to request the cooperation of commission men in setting up a better market.

Dr. W. C. Ockey, in discussing the subject, "Other Marketing Problems and Goals for 1942," said that the goals for fruits must depend largely upon nature. The problem resolves itself largely into a matter of utilization and canning, plus the greater operation of advertising agencies.

The goals for fresh vegetables are only slightly larger than those of 1941. The goals for canned vegetables include 40 million cases of tomatoes, an increase of 25% over that of 1941; for peas 28 million cases, or 30% more; for snap beans 12½ million cases; and for corn 24 million cases.

He discussed the proposed minimum price to the grower of $5.00 for tomatoes, and $17.50 for peas over the 1941 prices, and a stipulation that the canners must contract for tomatoes in order to get benefits of a minimum price of 95 cents per dozen for No. 2 cans of C grade tomatoes, and $1.10 per dozen for No. 2 cans of C grade peas.

Mr. Shook, Secretary of Tri-State Canner's Association, stated that the tomato goal would require 18% increase in acreage or 10,000 acres in Maryland, or, on the basis of tonnage, an increase of 51,000 tons over the 204,000 tons of 1941. In the Tri-State area, during the period of 1935-41, about 52% of the canners went out of business. Equipment available can do 25% more pack than in 1941. Labor is short and some plants operated on a 60% basis in 1941 due to a labor shortage.

Following Mr. Shook's talk, there was a long discussion by growers as to the unfairness of the minimum prices set up by the U. S. D. A., and a question as

to the feasibility of the contract system for the Eastern Shore area through the states of Virginia, Maryland, and Delaware. This discussion resulted in a motion by Albert W. Dickerson, Snow Hill, Maryland, as follows:

"That the Horticultural Council of Maryland appoint a committee of five to contact the State Agricultural Defense Committee and inform them of the growers' wishes on minimum crop prices of horticultural produce."

This motion, which was seconded by Mr. Bennett, Mardela Springs, Maryland, was passed.

F. Ridgely Todd was unanimously elected to serve as chairman during the coming year.

The nominating committee of the Maryland Vegetable Growers' Association recommended that the present officers hold over until 1943.

They are as follows:

President—H. J. W. Rayner, Salisbury
Vice-President—Clay Whiteford, Whiteford
Secretary-Treasurer—W. R. Ballard, College Park
Director—Edgar L. Williams, Salisbury
Director for Farm Bureau—George H. Strattman, Sparrows Point
Delegate to Farm Bureau—Egbert Hawkins, Harmans
Director for Agricultural Corporation—William G. Lynch, Dundalk.

Egbert Hawkins for the auditing committee reported that the treasurer's accounts were found to be in order. The balance in the treasury as of December 31, 1941, was $94.87.

REPORT

OF THE

Maryland Stockmen's Association

THIRTEENTH ANNUAL MEETING

January 7, 1942

Baltimore, Maryland

Mr. J. Maguire Mattingly, President, opened the Thirteenth Annual Meeting of the Maryland Stockmen's Association in the Lord Baltimore Hotel, Baltimore, Maryland.

PRESIDENT'S ADDRESS

J. MAGUIRE MATTINGLY

It gives me great pleasure to welcome you to our Thirteenth Annual Meeting. Despite the fact that I have not been a very active president of our Association, I consider it a distinct honor to serve and wish to express my appreciation to you stockmen who have contributed to the advancement of the livestock industry.

Among the outstanding accomplishments during the year were the consignment sale of the Maryland Swine Growers' Association; the Percheron Day of the Frederick County Percheron Association; the Show and Sale of the Aberdeen-Angus Breeders' Association; the Andelot-Cremona Sale of Aberdeen-Angus cattle; the Hereford Sale, and last but not least, the Baltimore Livestock Show. All of these accomplishments are indicative of the progressive spirit which exists among our members and promise greater things for the future of the livestock industry in Maryland.

Farming is at the front as it never has been before. Agriculture generally has a duty to the nation, the importance of which cannot be over-estimated. In truth, farmers are on the firing line just as much as the boys in uniform. "Farming at war" means creation of products as essential as any manufactured article and as necessary to final success as guns and ammunition. War is exceedingly complicated now as compared to the time when small forces of armed men would fight it out on their own. War, as business has become organized. The whole society goes to war—and above everything else needed is food for those engaged in the battle.

Just as the downfall of the dictators will be hastened by the starving multitudes which they cannot feed, so will success be insured by the production of foodstuffs for the winning democracies. For over a year

thousands of tons of pork, beef, and milk products have been sent to the territory of our Allies. Great Britain would have fallen long before now had it not been for the produce raised by the American farmers. It is essential to the waging of a war as well as to the repairing of the damage done after the war that there be sufficient foodstuff to sustain life.

The present condition of the livestock industry in Maryland would seem to indicate that we are in a position to make a notable contribution to National Defense at this time of emergency. We have built in peace times an industry which will help assure the success of our armies in war times. Towards the ultimate accomplishment of this purpose let us all bend our efforts.

REPORT OF SECRETARY-TREASURER

J. B. OUTHOUSE

The Secretary-Treasurer gave a brief resume of the Twelfth Annual Meeting held in 1941, and expressed his appreciation to the members for contributing to the success of the Monthly News Letter. Attention was also called to the fact that membership in the Association decreased from 131 in 1940 to 110 in 1941.

The financial report was approved as read:

Balance forward from 1940	$172.12	
Receipts:		
110 memberships @ 1.00 each	110.00	
		$282.12
Expenses:		
Expenses for 1941 banquet	20.35	
Envelopes	9.50	
Stamps	34.00	
Stenographic help	1.40	
Farm Bureau dues	20.00	
1942 banquet tickets	1.00	
		86.25
Balance on hand as of January 7, 1942		$195.87

HORSES IN MARYLAND AGRICULTURE

JOSEPH M. VIAL, University of Maryland.

On April 1, 1940, the census figures show 79,539 horses and 11,126 mules on Maryland farms; 6,056 of the horses and 381 of the mules listed are from 3 to 27 months of age. We should have 10,604 colts between 3 and 27 months old and 2,794 mule colts of the same age to take care of

our own replacement needs. There is still room for continued horse breeding in the State of Maryland.

Have we the work stock or the tractor power to get the job done that now confronts us? Looking at the tractor situation on the same date, April 1, 1940, the census figures reported 10,335 tractors on Maryland farms. By doing a little calculating I find that this gives us for farm field power 1 tractor to each 150.6 acres of crop ground, including hay ground, and 1 horse of 27 months of age or over for each 16 acres of crop land, including hay. It is my frank judgment that in an emergency the field power is available in sufficient quantity to get the task done.

The average Maryland farm contains approximately 100 acres of ground. The average farm has 11.6 acres of corn, 10.84 acres of small grain, 9.47 acres of hay, 3.47 acres of potatoes and vegetables for sale, .94 acres of tobacco, and .85 acres in orchards and strawberries, making a total of 37.17 acres of crop land including hay, orchards and all. We find on the average Maryland farm the following livestock: 2.48 horses, 7 cattle, 1.3 sheep, 3.7 hogs, and 74 mature chickens. At this time I would pocket my own petty prejudices in favor of the horse and not quarrel with the man who feels that he must, owing to labor shortages, do a part at least of his work in the field with the tractor. I think that machinery-minded individuals should concede as much to the horse user and likewise not magnify the rush work argument. If you will go back to the figures quoted above for the average Maryland farm, it looks like any able bodied Maryland farmer could take care of the task single-handed with the horses available on that farm, were there no tractors in the state at present or if tractor supplies and parts could not be secured. Let me urge you not to be sucked in by the argument, "I must have a tractor to get the rush work done." Truly, no sane person can look over the figures given previously and find much cause for rush of work that demands tractor power to complete it on a well-planned, properly organized farm.

On April 1, 1940, only 22.4% of the farms in Maryland reported tractors. This was an increase of 6.8% in the previous ten years, which is quite consistent with the country as a whole. A very plausible argument usually is that you can farm so much cheaper with a tractor. On April 23, 1940, Carl C. Taylor, Head of Division of Farm Population and Rural Welfare, of the U. S. Department of Agriculture, testified before a committee of Congress and pointed out the following pertinent points: "An increasingly larger share of farm income now spent for farm implements and machinery and for their operation, which contributes to the rigidity of the farm operating cost structure and the disparity of farm income and parity income, increases the competition between operating costs and the farm family standard of living."

There is some possibility that an increased demand for horses for delivery may result in this war effort. There is a possibility that diffi-

culty in receiving tractors and tractor parts as well as other machinery parts may increase as production efforts proceed. I question whether many farmers today have horses sufficiently well broken to supply commercial users demands if and when the demand should come; so give this matter a thought in looking ahead and be ready if the demand arises. One motor transport company in Chicago is already trying out a number of team units and indications to date show that this particular firm intends to increase the use of horses in congested traffic areas not only here but elsewhere in the country.

WOOL MARKETING PROBLEMS

H. H. HULBERT, Farm Credit Administration

Maryland, as you know, doesn't produce a whole lot of wool. The Department of Agriculture indicates there's only about 66,000 head of sheep in the whole State. Last year Maryland produced about 416,000 pounds of wool. Your fleeces average a little more than 6 pounds to the fleece.

Wool production for the country as a whole in 1940 was about 450 million pounds. In addition to our domestic production we import normally about 100 million pounds of wool for clothing purposes and about 200 million pounds for carpet purposes.

Our normal consumption of wool is about 600 million pounds a year. Because of the demand for wool for war purposes our consumption last year was nearly doubled.

Wool ranks with guns, ammunition, airplanes, and tanks as a war material. Right now in Russia we are witnessing what the lack of wool can do to the morale of an Army. Hitler's plans apparently did not include a winter campaign in Russia.

To safeguard our wool supplies the Government has set out to build up a stock pile. Our stock pile to date is in the neighborhood of 200 million pounds of wool. This wool, which is being brought in from Australia and South Africa, part of it owned outright by the United States Government and part owned by the British Government, is to be used only in an emergency. Present plans call for building this stock pile up to 300 million pounds.

Many growers have become alarmed at these large imports, fearing that domestic prices would level out with world prices which are several cents below present domestic wool quotations. Defense officials have come to the rescue in this case—they are granting preference to manufacturers who use domestic wool in Defense orders.

Because of wool's importance as a war material the Office of Price Administration has established a ceiling on wool prices. The current price is based on an average of quotations between October 15 and De-

cember 5. At present this price on fine wool is equivalent to $1.10 to $1.12 cents per clean pound. If the price ceiling is taken off entirely, our domestic prices for wool may decline several cents a pound. This will probably follow, because at the present time our ceiling price protects our domestic wools. Our domestic price is now about 10 cents a clean pound higher than the world price.

Uses of wool for civilian purposes are being restricted to about 40% of that consumed in the first quarter of 1941. To date these restrictions have not affected you and me. There is apparently plenty of wool for all.

While wool growers in Maryland are not vitally affected by the burlap situation because you use so little for bagging wool, some mention should be made of it in a meeting of this kind. Burlap is a war material. It has many uses, and the situation in burlap may become very tight before the war is over. Practically all our burlap is imported from India. To my knowledge, we have only one burlap weaving plant in the United States. Should it become impossible to ship jute from India our supplies will be difinitely cut off. In the light of these facts every farmer should save and conserve all the sacks he now has.

Much of the wool produced in Maryland is not tied when marketed. A great deal of it is bagged without tying. Frequently, not much care is taken in preparation. One reason for this is that there has been no incentive for tying wool. Untied wool brought just as much as tied wool, so why bother. This is an indictment of the wool marketing system though, rather than a valid reason for not doing a better job of wool preparation. In 1940, your cooperative, the United Wool Growers Association, sought to give growers an incentive for tying their wool by giving a ½-cent premium on tied wool; that year the association sold 46,715 pounds of Maryland wool, but only 14,349 pounds was tied wool. This year the association sold 65,603 pounds of Maryland wool, and the percentage of tied wool was higher than last year.

There are reasons and very good ones, however, for tying wool. In the first place, mills prefer tied wool. Unless wool is tied fleeces pull apart and are hard to handle. The way our wool is prepared for market, mills can't dump wool by the bag into their machinery for scouring. Each fleece is handled by itself. It is torn apart and divided into various sorts.

When tying wool, use paper twine or some kind of smooth twine. Every year a certain amount of wool comes to market tied with sisal or binder twine. This is worse than if the wool weren't tied at all. Sisal fibers mix with the wool and they don't take the dye. They show up particularly on dark cloth and have to be picked out by hand. Wherever possible soluble paint should be used in marking sheep. When ordinary paint is used, it does not scour out and has to be cut out by hand.

Many of you perhaps are wondering about the price differential between foreign and domestic wool under normal marketing conditions. Why do foreign wools command a premium over our domestic? It is generally known that manufacturers will purchase some foreign apparel wools, pay the duty, and pay as much as 10 percent more for them than they will for domestic. The principal reason for this seems to be in the manner in which these wools are put up and prepared for market. For instance, when a bale of Australian wool comes to our United States markets, it is guaranteed as to grade, quality, and shrinkage. When a manufacturer buys a bale of Australian wool, he knows that every fleece in that bale compares with the others in grade, quality, and shrinkage. Contrasting this with the domestic pack of wool, when a manufacturer purchases a 300 pound bag of wool, he probably purchases four or five different grades, each grade with a different shrinkage and quality, and because the fleeces are not skirted there is 10 or 15 percent of each fleece that the manufacturer cannot use at all, but must sell to some other concern who can use that type of wool.

New problems for the wool growers are developing on the horizon. Because there are not enough domestic wools to go around and take care of both civilian and war needs, many manufacturers are for the first time using foreign wools. Many of these wools are not superior in quality to our domestic wools, but they are put up in a superior package that eliminates waste and facilitates handling, and naturally manufacturers prefer them.

After this war we must find ways to compete with not only superior wools but with better packaged foreign wools. It seems to me that it is a challenge to your cooperative association and all the cooperative wool marketing associations throughout the country, and I believe that *any improvement effected must be done by the cooperatives.* No other branch of the industry is going to be interested in developing a better marketing program.

PROBLEMS IN SWINE PRODUCTION

GUY E. HARMON, Queenstown, Md.

At Blakeford we are now carrying on a breeding and feeding program in cooperation with the University of Maryland and consequently are keeping records of vital importance to both institutions. While I realize that all hog raisers cannot follow the practices we are doing yet, if they will pay closer attention to their feed, care and management, it will mean more dollars in their pockets for the same amount of work.

The type of building to be used in hog raising I consider one of the biggest problems. We have both the colony and the central houses. We are using a central house for our farrowing and fattening work.

In the fattening house we have 16 pens, size 8′ x 12′, with an outdoor run 8′ x 16′. All of our floors are concrete and, while I realize that some-

times our hogs get a little stiff before sending to market, yet we can keep them so much more sanitary at all times.

Our fattening pens are cleaned and bedded every day and the floors are washed at least once a week. It pays to keep the pens clean because our hogs make faster gains and we get them to market more quickly. In our central house we can turn out 160 head twice a year, as we allow 10 head to each pen. Drinking cups are located in each pen as well as a self-feeder. This is very important because the hogs have access to fresh water and clean ground feed at all times.

In the central house we have our farrowing pens, each 8′ x 9′ with an outside pen 8′ x 12′ for exercising. All the farrowing pens have guard rails and a brooder type lamp for the pigs. The young pigs quickly learn where the heat is and spend all of their sleeping time under this light. Our loss on pigs being laid on or mashed is down to a minimum and we have found this heating device very profitable.

We also use for our pasture lots houses 8′ x 16′ with a partition in the middle. The ends can be raised in the summer which gives shelter from the sun and keeps the houses cool. These houses are on skids and can be moved anywhere with a team of horses. The cost of this building is $125.00 complete, made out of long leaf fir.

In our experimental work with the University it was necessary that we pay very close attention to the selections of our boars and sows, and regardless of this experiment we have learned that one cannot stress too much the importance of good breeding stock.

All of our breeding sows and boars are fed on a grain mixture of 600 lbs. corn meal, 100 lbs. barley, 100 lbs. corn gluten, 100 lbs. fish meal, 50 lbs. alfalfa meal, 50 lbs. soybean meal and 20 lbs. mineral mixture. This mineral mixture consists of 100 lbs. ground limestone, 100 lbs. steamed bone meal and 100 lbs. salt. Our sows are fed at the rate of 4 to 8 lbs. per day in troughs, and have access to plenty of fresh water. We also have alfalfa hay in racks so the sows can help themselves, and they consume an average of between 2 and 3 lbs. per day. It is surprising to see how well they like it, and there is practically no waste.

All of our sows are hand bred. After being bred they are put in a good pasture and dry quarters and we are most anxious that our sows take plenty of exercise. We usually figure on 112 days gestation and a few days before this period is up the sow is brought in to the farrowing pen and put on a light grain ration, gradually decreasing this until the day of farrowing. After the sow has been put in the farrowing pen her udder is washed well with a good disinfectant, and she is watched carefully until farrowing time. As fast as the pigs are born their navel is treated with iodine and each pig is dried with a cloth. If the day or night is cool, the pigs are placed in a warm basket near a stove. Each pig is weighed at birth, markings recorded, and the "wolf" teeth clipped.

The pigs are placed back with the mother to nurse and, when finished, they are immediately placed in the pen under the brooder light, and this is the beginning of a lesson the young pigs soon learn.

The pigs are weighed at three weeks of age. All pigs are double treated for hog cholera at four weeks old, and are weaned and weighed when 56 days old.

All of the work mentioned has been done on purebreds and crossbred Berkshires. However, we also have a small herd of Yorkshires and have found them very profitable and, I consider a Yorkshire sow one of the best mothers I have seen. They are prolific, good milkers and usually raise practically all of their pigs.

I have this to say in closing: I think more of our farmers should cure more of their own pork. I'll wager that every one in this room would be pleased to sit down right now to a table where there is a country ham. Yet, how many in this room are curing their own hams.

A NEWCOMER'S BEEF CATTLE VIEWS

E. J. THOMPSON, Knoxville, Md.

A little more than a year ago, I found myself considering an invitation to come to Maryland to look over a proposition of managing and looking after an extensive farming and livestock business. I had always thought of this area as a great grazing area, and I thought it an opportunity to carry out plans that were partly laid out to breed and produce good livestock.

During last winter we finished at Tyrconnel Farms a number of yearling steers which did very well in returns for feed consumed. These steers and the heifer calves were creep fed on pasture and put into the feed lot and carried forward on hay, silage and some grain. In the fall the silage for these steers was reduced, grain increased and steers sold in the spring, dressing a very nice percent on the market. They paid for their feed, and the manure produced went onto a corn field which yielded a good silage crop this season to again feed steers, but which will be used most generally for carrying through to the grazing season the breeding herd of cows, and the heifers for future sale or replacement.

Last summer, in spite of the dry weather that prevailed, which has prevented hay crop, pastures and small grain crops from being abundant, one of my visitors from the far west said he thought we had one of the best grazing regions he had seen and in this viewpoint I hold the same opinion. I can't help but note the fine bluegrass pastures that prevail here and there. I think the carrying capacity of these farms is truly remarkable.

In observing the other grasses so prevalent over the States I am impressed with the orchard grass, its early growth in the spring and

great ability to come back after being eaten down quite thoroughly makes it a fine grass to bear in mind for cattle pasture.

In the North West, Brome grass (Bromus Inumus) does a great job at furnishing early and late pastures. It might do well here in Maryland as it does yield a great tonnage and beef cattle like it as well as the beef herd liked orchard grass in our own pastures.

I have seen lespedesa, dutch white clover, medium red clover and mammoth red clover do well within the state on many fields. I am pleased to note so many of the farmers realize the value of manure in giving texture to the soil and adding fertility. A soil with organic matter makes a great seed bed for grass, clovers and field crops.

The use of fertilizer and its value to production seems to be realized more than I could suspect. It has been my observation that regions which find a serious need for commercial fertilizers are in a good way to build up their herds and flocks.

In this area there are two phases of the cattle industry which thrive, beef cattle and dairy cattle. Both consume pasture. While dairy cattle must consume more grains and concentrates and higher quality foods generally, they also necessitate quite a noticeable lot of labor the year around. This labor must be quite skilled if dairy herds are to be most profitable.

Beef cattle can and are carried on much cheaper feeds. They will consume the coarsest rough feed on the farm and of course will do well on the better quality hay and roughage the farm produces.

I have been surprised at the good handling of young stock, the yearling heifers, bulls and steers in this area. Someone, or several, must be credited with the energy and push that has led forces to get over to the people the great place that Maryland is for beef cattle and how well the beef cattle fit into the scheme of farming here. They do not compete with dairy cattle, sheep or hogs, but, fill a niche unoccupied for many years.

It has surprised me no little to know that many of the herds that have been established are purebred herds. Our farmers and breeders know that the very best cattle are none too good to get the efficient feeding steers that do the best in the feed lot and in the market place.

WHAT 4-H CLUB LIVESTOCK PROJECTS HAVE MEANT TO ME

GEORGE LECHLIDER, Rockville, Md.

Just what 4-H Club Livestock Projects have meant to me is almost impossible for me to put into words. I feel that any one of my years in club work gave me more practical knowledge on livestock than I could have possibly gotten in two years of college.

You stockmen do not realize how much good you are doing when you help 4-H Club work. First of all, we meet the professional herdsmen and sometimes the owners of the large herds themselves. We learn what each man is feeding his stock and the way it is haltered or penned while at the fair. When show day comes, the club boys and girls watch and learn to show their own stock, and to take defeat as well as win. It also teaches us to meet people and make friends, all of which is very important after we get older and go into business for ourselves. When you stockmen invite 4-H boys and girls to visit your farms, it always means a great deal to me, because I haven't been to a single farm where I haven't got a good point on how to make a feed trough or hayrack or how to feed stock to better advantage. This not only helps the boys and girls themselves, but their parents and neighbors.

When I started out in club work ten years ago, I had one grade brood sow, and then I gradually worked up until five years ago I started in the baby beef club and began exhibiting at fairs and seeing what other people were doing. Then, I would come back home determined to do better the next time. While I was doing this, I learned that it paid to have a purebred herd sire. We learned that a good herd sire is half of your herd, and I believe that a common herd sire is more than half of your herd because the offspring will not make you much money. I have found that you have to pay a little more for a good herd sire to begin with, but your offspring will pay that little extra back to you twofold. I know this to be a fact because I have been keeping accurate records on this for my 4-H Club work.

During my 4-H Club work I learned to judge livestock. This has been a great help to me in deciding which females to keep and which to market. It has given me a foundation to start with along with some valuable experience. As I told you, I started in club work with one grade brood sow and now I have a swine business of my own. I have a purebred Hampshire boar, two purebred sows and three grade sows. During the winter months I slaughter the hogs and make sausage, pudding and scrapple and sell them on the Washington market, while during the summer months I sell on the Baltimore market.

Three years ago the Baltimore & Ohio Railroad Co. sponsored a Western Lamb Feeding Project and I purchased fifteen lambs to feed. When they came into the stockyards, I thought they would all die because they looked starved out. But with a little feed and attention they soon snapped out of it and started to put on weight. That year I had first prize pen of five. The following year I purchased thirty and fed them out and had two blue ribbon pens of ten. Last year I got sixty lambs to feed and sold thirty of them three weeks before show time, keeping the other thirty until show time. I picked out ten of the lambs to show and had the first prize pen of ten again.

Five years ago I started in the Baby Beef Club with one Angus steer that wasn't very good, but he served his purpose. I learned how to feed

and handle him. The next year I had a Hereford steer that was Champion Hereford of Maryland and Reserve champion of the Baltimore Livestock Show. The next year I purchased one of each breed and had Champion Shorthorn of the Show, and last year I fed one of each breed and had Champion Shorthorn of the State. With the prize money and profit from these steers I bought seventeen others. This year I have twenty-five yearlings to feed out.

My father's farm is only a small one of 100 acres and this was too small to graze cattle on and also to feed them. So, last year I rented a 575 acre farm just across the road from my father's farm. With this much land I will be able to raise more feed and can keep more stock.

This has all come from my 4-H Club work. I might also add that I received a very worthwhile trip to Chicago. I could not begin to tell you what I got from that trip. I met cattlemen from other states and talked with them about their markets and their feeding program. I saw some of the nation's leading cattle. This is where I set my goal. I am going to try to work up a purebred herd of beef cattle of my own to show, some day.

LIVESTOCK DISEASE SABOTAGE—INTERNAL AND EXTERNAL

Dr. Mark Welsh, State Veterinarian

We should not become unduly apprehensive concerning the introduction and spread of disease foreign to this country. We should, however, recognize under war conditions the possibility of sabotage of our live stock industry and be sufficiently alert and vigilant that no disease, domestic or foreign, remains undetected.

It is well to remember that all nine outbreaks of foot-and-mouth disease that have occurred in this country with the exception of two have caused serious loss along the Eastern seaboard and in Maryland. This infection is now prevalent throughout the European continent, in parts of England and South America. The United States is one of the few large areas where live stock raising is a major industry that is now free of this costly disease. Death losses are relatively low, but loss of condition and production together with the quarantines necessary cause heavy financial loss.

Rinderpest has never occurred in this country but has been in the Philippines and in certain South American countries. The mortality rate is virtually 100% and it is a virus disease easily and rapidly spread. It primarily affects cattle although losses in other species also occur.

European Fowl Plague is a virus disease of poultry having approximately 100% mortality. A small outbreak occurred in the Middle West a few years ago but through the enforcement of drastic measures it was eradicated.

There is probably no reason for feeling undue apprehension concerning the introduction of these foreign diseases but when there is any question concerning disease of an undetermined origin, competent assistance should be secured so that it may be detected as early as possible.

No serious outbreaks of any animal disease have occurred in Maryland during the past year although anthrax has been found on seven different premises. This disease is caused by an organism that produces spores that may remain in the soil for 26 years or more. Efficient vaccines and serums are available and in the outbreaks which have occurred, these were employed with most satisfactory results and relatively little loss.

Black leg was more frequently reported than in previous years but again due to prompt and efficient use of vaccines and serums, little loss occurred. This also is a disease in which spores are formed which may remain in the soil for a prolonged period of time. Where either blackleg or anthrax has occurred on a farm, it is most desirable that from there on, young stock be vaccinated prior to being put on pasture or other places where there is reason to believe the spores may exist.

During the past year, two new types of vaccines have been given rather extensive field trials for the prevention of hog cholera. In both the "Boynton's Tissue Vaccine," developed by Dr. W H. Boynton of the University of California, and "Crystal Violet Vaccine," developed by the U. S. Department of Agriculture, the virus is killed by chemical treatment and therefore does not introduce infection on the premises. The use of the serum-virus treatment often does establish a new center of infection and therefore is a most dangerous product. Both of the two new vaccines stimulate sufficient immunity to protect the animal against average exposure but they are not apparently satisfactory where frequent and heavy exposure is common as in a garbage feeding plant. There is every reason to believe, however, that the two new vaccines may well supplement the practices that have been long advocated in Maryland for the prevention of hog cholera.

Encephalomyelitis of horses was not definitely proved to exist in Maryland last year. There were some suspicious cases but not proved cases. Swine erysipelas was also rare during the past year. Trichomoniasis, a cause of abortion in cattle, was proved in a few herds but it does not appear to be widespread.

The Bang's disease program has been making most satisfactory progress. On January 1, 1942, there were, in Maryland, 3,415 accredited herds containing approximately 58,000 head of cattle, which is 19% of all cattle in the state. Under State, Federal, and private supervision there were 172,450 head of cattle on 25,662 premises. This indicates that approximately 60% of all cattle in the state are now under examination for Bang's disease. The Bang infection rate for the state as a whole when tests were completed in 1936 and 1935 was slightly over

15%. This has now been reduced to a little less than 7%. Available records would also indicate that a higher percentage of Maryland calves are now being vaccinated than in any other state.

During the past year 4,453 head of cattle were sent to slaughter as Bang's disease reactors. These animals were appraised for a total of $520,911 with an average of $116.97.

It would take too long to report on the different diseases and conditions found in our laboratories during the past year. It is perhaps sufficient to say that over 650,000 examinations were made on blood, milk, tissues, and other materials submitted for laboratory examination. It is quite evident that the laboratories are serving a useful purpose in the communities where they are established and that the diagnostic and research results are greatly reducing the losses from animal disease.

AN EASTERN PACKER'S VIEW OF LIVESTOCK PRODUCTION AND MARKETING

W. E. HUNT, Baltimore, Md.

I am personally convinced that there has been too much attempt on the part of eastern producers and eastern marketing agencies to ape corn-belt production and marketing rather than trying to adapt production and marketing programs specifically suited to the eastern packers' and eastern consumers' requirements. It therefore gives me special pleasure to have this opportunity to present an eastern packer's views to the members of the Maryland Stockmen's Association.

We are all justly proud of the tremendous improvement which has been made in Maryland livestock production over the period of the last ten or fifteen years. The development and improvement of the purebred beef cattle and the horse industries have been truly phenomenal. However, unless some of the improvement in our purebred livestock filters down into commercial production we are a long way short of the ultimate goal. We cannot continue a healthy, prosperous, growing livestock industry indefinitely on the basis of a comparatively few skillful purebred breeders swapping high quality breeding stock among themselves. While we have much to be proud of in our purebred activities we have very little to brag about as yet in our commercial livestock production activities.

In fact, there are a number of acute problems in Maryland's commercial livestock production and marketing which are in need of considerably more attention than they have been given in the past. These problems are concerned with type and finish of market animals and some marketing practices.

I would like to tell you something about the eastern meat packing industry, its size, importance, its basis of operation which is different from that of typical western or national packers.

In the thirteen eastern states, from Maine on the north to Virginia and West Virginia on the South, there are about 235 establishments conducting slaughtering and general meat packing with about 385 additional establishments engaged in the making of sausage and meat food products.

I would like to call your attention to the fact that these eastern packers with their plants located in the thickly populated areas of eastern states not only provide a market for the livestock produced in the eastern farming areas but also must draw upon the livestock supplies produced outside of the Atlantic Coast area.

The basic features of operations of the eastern packers are somewhat different from the typical corn-belt or western packer. The eastern packer, having his plant located right at the center of consumption, caters to the demands of consumers in his own restricted area. The eastern packer is, in fact, a meats merchandising specialist and gives major emphasis to the distribution end of the business.

This is in direct contrast with the typical western or national packer, who, having his plants located in the great livestock-producing areas, has as his first obligation the purchase and processing of all livestock produced and offered to him, later seeking to find the best outlet possible for the products. The eastern packer receives his livestock supplies from a wide area and distributes in a restricted area. The western packer obtains the bulk of his livestock supplies from a relatively restricted area and distributes his meat products in a wide area.

This fundamental difference in the basis of operations of eastern and western packers makes it possible for the eastern packer to render special services to the livestock and meat industry. By catering to the demands of consumers in the thickly populated consuming areas of the east and providing them with strictly fresh, high-quality products of the weight averages required by them, the eastern packer tends to increase the consumption of meat and meat products.

Another special and important service rendered by the eastern packers is that they act as a reservoir of supply capable of meeting sudden and unexpected increases in demand. The eastern packer is also better able to nurse a weak demand efficiently. The eastern packer, when confronted with an unexpected decrease in demand, immediately reduces his kill and cut and carries his surplus in the form of live animals and carefully nurses such weakened demand with strictly fresh, high-quality products in their full "bloom."

In addition to being in a position to give special attention to demand, the eastern packer renders a very special service in the field of livestock production and marketing. It is hardly necessary to mention that the eastern packers are a major price factor on the terminal markets. It is true that from a volume standpoint their purchases do not

compare with the volume of the national packers, but at the same time it is usually the eastern packer who sets the price pace on most of our markets. I think it is worth emphasizing that the livestock purchase of the eastern packer recognizes quality. The eastern packer is most sensitive to shifts in the area of production, the type and quality of production, and to market practices prevailing on our various livestock markets.

The livestock purchased by the eastern packers usually represent special quality and weight selections. Few producers, I am sure, have any appreciation of the difficulty experienced by eastern packers in obtaining the quality of livestock desired. Wrapped up in this situation are a number of mutual problems of producers and packers which must be faced and solved if the industry is to make any lasting or satisfactory progress.

In my opening remarks I stated that eastern livestock producers as a whole were not doing a very good job of filling eastern packer requirements. Principal evidence in support of this fact is the great difficulty of eastern packers in obtaining livestock suitable to the trade requirements for meats. On eastern livestock markets the great bulk of available cattle, hogs and lambs are of a type, weight, or degree of finish for which the local packer must hunt a home rather than the type, weight and degree of finish for which there is a ready market. I realize I am about to embark into rather rough and controversial waters which usually are carefully avoided by packers and producers alike in meetings such as this.

The commercial livestock production of the east fails to meet eastern packer requirements in the following respects: first, in regard to beef production— in spite of the marked changes in type and quality traceable to the effects of the Baltimore Livestock Show, much too large a proportion of market cattle are plain breeding, poor conformation, and are marketed either considerably under-finished or excessively finished for their conformation and general quality. The great majority are too heavy for the bulk of the beef demand and are marketed in a market-glutting manner. On the other extreme, some of those feeding well bred, high quality calves tend to over-shoot the market, producing beef suitable for and appreciated only by a relatively few connoisseurs who can afford to disregard high prices and excessive waste. The majority of producers who have switched to feeding calves and yearlings do not start full feeding early enough or at light enough weights so that their yearlings are underfinished at most desirable market weights of 800 to 950 pounds. Too often for the good of the local beef industry and the livestock and meat industry in general, the failure of beef cattle production and dressed beef demand to coincide even reasonably well results in meat dissatisfaction and lower consumption by consumers.

As unsatisfactory as is our local commercial beef production by virtue of being out of focus with dressed beef requirements, the situation is

better than prevails in our Maryland commercial swine industry. Approximately half a million hogs per year going through the Esskay Plant come from practically all sections of the corn-belt, the east and the southeast. In this great parade of commercial hogs, Maryland holds a unique and leading position in one respect. From no other section does there come such a conglomeration of types, breeding, and degree of finish. From Maryland farms come little chuffy hogs, reminiscent of the hog type of 1900 and some of the lankiest, longest-bodied, slab-sided, flat-ribbed, cat-hammed specimens of porcine misfits that ever haunted a packer buyer's dreams. And there are some good hogs, too—those long-bodied, relatively straight-backed, smooth, deep-sided pigs, with a good spring of rib wide enough on top to have plenty of room for lean fleshing and with plump, firm, short-shanked hams fleshed right down to the hock. But this kind, especially when grain and protein supplement fed, are decidedly in the minority. For the good of the swine industry and pork trade we produce too many garbage hogs and feed most of our hogs to too heavy weights, over 200 pounds.

Our Maryland commercial lambs are typified by heavy headed, coarse, raw-boned lambs, usually too heavy, over 90 pounds, and usually too thin, resulting in low yielding lambs and coarse, rough carcasses.

Maryland's commercial livestock production thus presents a rather dismal picture. Certainly much different from our purebred livestock future. Why should there be such a contrast? Why should our commercial livestock production be so out of gear with meat trade requirements and fail to contribute to farm income in closer proportion to its inherent possibilities?

I would like to discuss one problem of livestock production and two problems of livestock marketing which lie at the heart of our livestock industry and are largely responsible for the conditions or symptoms just described. First—is the type problem; Second—buying and selling by quality grades; Third—terminal livestock markets vs. direct marketing and country markets.

In discussing the type problem we will have to recognize the fact that there are two schools of thought on the type problem. The one school argues, "Further improvement is not commercially feasible". The other school of thought maintains that "Further improvement is imperative, possible, and practicable."

Rather than spend time in a negative way refuting the arguments of the first school, let us examine in some detail the facts supporting the position of the second group. Our company which distributes on the entire Atlantic Seaboard from Massachusetts to Florida, receives more complaints because of meat cuts being too fat, too coarse and heavy than from any one other reason. If you will trace the changes in the price relationships of the major cuts of pork—hams, bellies, picnics, and of lard, you will realize the increasing emphasis upon lean meats.

Canadian pork production has been based on satisfying the needs of the consumers for a lean pork product. Even on the American market, Canadian hams have always commanded a fancy premium over the American product.

The second reason why an improvement in pork type is imperative is that the present type produces too much lard and lard cannot be produced to compete in cost with vegetable oils and fats. In addition to the tremendous increase in production of fats and oils there have been phenomenal improvements in technology of oil processing so that various types of oils are much more interchangeable than used to be the case. Accompanying this improved fat technology has been a loss of popularity for lard in spite of the fact that for general household purposes lard is without a peer as a shortening agent. Prospects are that lard is going to continue to be sold on the level or below the level of certain of the vegetable oils.

The few facts here presented set forth the position of those who claim that improvement in hog type is imperative and possible.

You will recall the type changes we have had in hogs, starting with the excessively fat hog of the early days of the packing industry on up to the turn of the century. The object of this type was to market as much corn on the hoof as possible but producers themselves overdid it to the extent they lost ruggedness, feeding ability and prolificacy and so to prevent the hog from becoming extinct via racial suicide, the type was changed to a larger, more rugged and prolific animal. Bear in mind that this was a producer inspired change almost exclusively. With the demands for increased production during the time of the first world war, the swing to this type was accentuated and continued in order to again increase the amount of pork which could be produced and to market the maximum amount of corn on the hoof. However, it was soon realized that this type of hog was taking pork right off the consumer's table as the large, coarse and over-fat cuts did not meet ready consumer acceptance and for the first time in history the swine industry began to look at consumers requirements.

It is very obvious that all these changes in hog type practically have left the consumer out of the picture. This brings me to the statement I consider to be the heart of the hog problem. We have a type problem in American pork production because we have insisted on viewing the swine industry and all production operations on the basis of the hog providing a market for corn. We have *not* considered our swine industry as a means of producing meat food products wanted by the consumer.

We will have a type problem just as long as we continue to change the weight and finish of our market hogs in response to the size and price of the corn crop in relation to consumer purchasing power, (corn-hog ratio), and we will continue to complicate our type problem and

alienate the consumer from pork products if we now change our hog type in response to government purchases under the Lend-Lease Act.

The consumer demand with respect to size, quality and amount of fat on meat cuts of all kinds is relatively constant. It is the supply that is variable, causing prices of different weights and grades of livestock to fluctuate.

I would like to mention briefly two very controversial marketing problems. Of first importance is the matter of sale of livestock, especially hogs on the basis of quality rather than weight alone.

Producers and marketing agencies in Indiana also recognize the importance of this marketing problem but unlike most folks they have tried to do something constructive to solve it. The type of Indiana livestock, especially hogs and the system of feeding and management recommended by Purdue and accepted by the majority of leading livestock producers have recognized consumer requirements and have resulted in the production of livestock which more nearly meets the requirements of the trade than hogs produced under typical western corn-belt conditions.

Certainly the position of the eastern packers is perfectly clear. Unless producers, commission men and buyers other than the eastern packers also recognize quality sorts, the problem will never be solved.

A frank discussion of terminal markets versus country point markets is another "hot potato" carefully avoided by most packers at meetings such as this. The day of the complete dominance of the central or terminal market is undoubtedly gone forever.

Most of the virtues and vices ascribed to each of these systems of marketing are really livestock marketing phenomena that are not the exclusive property of either terminal marketing or direct marketing.

Decentralized livestock selling has certain decided disadvantages from the standpoint of the eastern packers with consequent damage to the livestock producer. First—the great dispersion of receipts in a multiplicity of small markets reduces the number of markets available for use by packers who are selective in their buying requirements, as there is not sufficient volume for satisfactory quality and weight sorting. At the same time, this reduces the livestock available for purchase by eastern packers, and other packers with a restricted livestock requirement, on the large markets. Thus, the entire field of the smaller market and country buying is left to only a very few buyers—one or more of the national packers or the largest independents. Such "mine run" buying with limited competition provides a sizeable volume of lower cost meat products with which the eastern packer and smaller packers in general must compete. The lower cost meats from this bargain livestock is dumped on the consuming markets in a manner that demoralizes

competitors requiring them in turn to buy their livestock for less—all of which benefits nobody.

Certainly, it is not healthy for the producer to continue to lose outlets for his livestock. So let us be certain that our livestock marketing is not decentralized to a point that the virtues of this method of marketing are lost and only the vices remain.

The general health and vigor of Maryland's commercial livestock production will improve and begin to resemble that of its more fortunate relative, the purebred industry as we make progress in solving these three basic problems. Here is job enough to challenge the imagination and ability of the leaders of the industry with prospect of reward sufficient to justify the enthusiastic effort of all livestock producers.

PANEL DISCUSSIONS ON LIVESTOCK PROBLEMS

Led by DR. F. H. LEINBACH, College Park, Md.

Dr. Leinbach summarized the talks of the morning and of the afternoon sessions and referred questions pertaining to each subject to the speakers.

THE MARYLAND STATE FAIR BOARD AND THE MARYLAND STOCKMAN

JOHN E. CLARK, Bel Air, Maryland

Mr. Clark outlined briefly the functions of the Maryland State Fair Board and encouraged farmers to exhibit livestock at their county fairs. He mentioned the services of the Fair Board in taking moving pictures of state exhibitions. These movies are available for showing to those groups desiring to obtain them.

At this point motion pictures of Maryland State Fairs and Shows were shown by John E. Clark, Field Representative of the Maryland State Fair Board.

The following officers of the Maryland Stockmen's Association were elected for the ensuing year:

President:	Richard C. Riggs, Catonsville
Vice-President:	Jos. W. Shirley, Reisterstown
Secretary-Treasurer:	James B. Outhouse, College Park
Executive Committee:	W. Alan McGregor, Worton
	Guy E. Harmon, Queenstown
	Richard C. Riggs, Catonsville
	W. E. Hunt, Baltimore
	Dan E. Wight, Frederick

Delegate to Annual Meeting of Maryland Agricultural Society: Wm. J. Hines, Brinklow

Director to Farm Bureau Federation: H. R. Shoemaker, Frederick

Delegate to Annual Meeting of the Farm Bureau Federation: J. E. Muncaster, Derwood

EVENING SESSION

HOTEL EMERSON

Mylo S. Downey, Ass't. Boys' Club Agent, College Park, presented the State 4-H Club Livestock winners.

MARYLAND AGRICULTURE AND DEFENSE

DR. T. B. SYMONS, College Park

The vital importance of the agricultural industry in our war industry is generally recognized. Maryland producers will more than meet their quotas, but in doing so will meet some problems and I want to mention some of them and some means of overcoming them. First, I would remind you that emergency conditions almost always intensify problems that exist under normal conditions. Meat is the basic article in the diet for vigorous, healthy people, and certainly there is the greatest need for the best of health and stamina in all the people, including both the armed forces and the civilians. It has been shown conclusively that a very large number of people have not been having adequate diets for maximum health and efficiency, indeed a large number are far below the level of adequate nourishment, and these times call for every ounce of effort and the greatest possible efficiency from everyone.

Likewise the problem of feeding livestock more efficiently is one of the important problems in normal times. It assumes new and different aspects in war time, and offers new problems. Just to mention one as an example—molasses is needed for other uses and but little, if any, will be available for feed or as a preservative for grass and legume silage. Then while we are thinking of the livestock industry from the standpoint of providing meat, we must not overlook its contribution in the way of power. The need for greater use of horse power has been foreseen in the defense program, but the entrance of this country into war has brought us face to face with the problem of transportation, both of people and commodities.

Feeding—It is generally recognized and agreed that the use of home grown feeds, especially the forage crops, is desirable for efficient feeding. I have asked the Head of our Agronomy Department, Dr. W. B. Kemp, to give me a picture of what we may expect in 1942 from the standpoint of home grown feeds. The national agricultural program calls for a reduction in corn acreage in 11 Maryland counties. You have heard of the "food-for-Freedom" program sponsored by the U. S. Department of Agriculture, in which definite goals for production were set up for the nation, for each state, and for each county. "With restricted acreage of corn", Dr. Kemp says, "the biggest single field crop need in Maryland agriculture is feed grains. At the very conservative estimate of four pounds of grain to produce one pound of meat, normal crop yields should

find the state with a deficiency of feed grains increased by more than 90,000 tons in 1942, if livestock and crop acreage goals established for Maryland are realized."

Dr. Kemp makes some practical suggestions for helping to overcome the added deficiencies in feed grains:

1. Increased planting of spring oats, particularly in the northern counties.
2. Increased use of recommended corn hybrids.
3. Increased use of fertilizer on corn.
4. Increased use of substitutes for corn that will not require molasses in silage.
5. Increased care in harvesting and curing hay to permit improved efficiency in use of grain feed.
6. Improved pasture fertilization and management to permit increased efficiency in the use of grain feed.

At a time when it is important to utilize all resources to greatest advantage, the pastures of Maryland deserve major consideration. They can be made to rank among our most important agricultural resources. Our pastures can be made a very important factor in helping the livestock industry of Maryland to most efficiently meet the emergency situation.

Breeding and Expansion—In view of the food situation for human beings and the feed situation for livestock of all kinds, it does not seem possible that the breeders of purebred livestock in the war torn areas have been able to carry on. While it is not safe to arrive at too definite conclusions from the almost total lack of information on conditions in Europe, it certainly appears within the range of possibility that this country may become a source of breeding stock for rebuilding herds and flocks from which we formerly made importations. In rebuilding the numbers of highly-bred animals, there are some who believe that artificial insemination will be an important factor. We have not gone very far in this field in this state. I believe that we should follow carefully the progress and development of research in this highly important line, and determine just what it may be made to mean to the livestock industry of Maryland.

Maryland is a deficit meat producing state. To overcome this deficit it is necessary for us to bring large quantities of meat into Maryland from other states. To meet the needs of our people for meat, it is necessary after using our entire production to import from other areas about 67,711,000 pounds of beef, 88,581,000 pounds of pork, 10,500,000 pounds of lamb and mutton, and 4,175,000 pounds of veal. We all like nice, thick steaks, but if we were forced to use only the beef produced

within our state, we would have to cut our consumption at least 75%. After meeting the quota of 15% increase in pork, we still have a state deficit of 60%. I believe this is sufficient evidence to indicate the opportunity for a reasonable expansion of our meat animals.

We have lost about 16,000 of the horse and mule population of Maryland in the last ten years. While our farm labor situation will be serious, yet I am convinced that more general use of draft horses will be economical and helpful. I believe we should consider holding hitching schools for the handling of draft horses for those in our towns and cities who have had little or no experience, but who will be called upon to help in the farm labor problem. Time does not permit discussing our light horse and thoroughbred industry. This industry represents a $25,000,000 to $30,000,000 investment in the state and a tremendous revenue in taxes.

Management and Disease Control—We know that good management ranks with good feeding and good breeding as a factor affecting the returns from our livestock, whether they be meat animals or animals kept for power. We know too, that losses by diseases levy a tremendous toll upon those engaged in the industry. They are among the things which require greater attention and care in a time of emergency than is ordinarily given to them in normal times. Efforts to increase production may lead to use of lower quality feeds, to use of rations that are not as well balanced, to housing that affords less sanitary conditions. I would urge that special care taken to assure the needed increased production is not offset in a measure by less efficient management and greater losses by disease.

Marketing and Distribution of Breeding Stock—Indications are for rather favorable markets for practically all kinds of livestock and livestock products in the immediate future. I repeat what I have said many times—I don't believe that our American genius has been properly applied to the distribution of farm products, or any other products, for that matter. We may well give what aid we can to meet distributors in the encouragement of the public to eat more meat. Great emphasis is now being placed upon proper nutrition and by urging the place of meat in a proper diet, the stockmen will not only be serving their own purpose, but will also be helping to carry out the program that is best for the individual and for the country.

REPORT
OF THE
ANNUAL MEETING
OF THE
Maryland Tobacco Growers' Association

January 7, 1942

C. Carroll Lee, of Annapolis, Md., who was recently elected President of the Association, presided.

In Mr. Lee's opening address, he stated that the Maryland Tobacco Growers' Association was a 100% cooperative, controlled by its membership who elect the Board of Directors and they, in turn, manage the Association. Mr. Lee stated "The Maryland Tobacco Growers' Association has been operating for the farmers for more than 20 years, during which time it effected benefits for the tobacco growers of Southern Maryland of inestimable value, and while the Association, as well as any other business, has made mistakes, they were far over-shadowed by the good things that have been accomplished."

Mr. Lee invited the cooperation and support of the people of Southern Maryland and stated he would have all his acts approved by the Board of Directors before putting them into operation.

Mr. George Sachse, Manager of the Maryland Tobacco Growers' Association since 1936, and who has been connected with the Association in various capacities since 1922, was introduced by Mr. Lee.

Mr. Sachse explained that the Board of Directors had approved a new Charter and set of By-Laws, which, if they met with the approval of the membership, would become effective in the Fall of 1942. Mr. Sachse read the Charter and By-Laws, and explained each item in detail. One of the important innovations of the new By-Laws would be that each patron who shipped tobacco through the Maryland Tobacco Growers' Association would automatically become a member for the ensuing year. The Charter and By-Laws, as read, were unanimously adopted.

Mr. Sachse then presented statements showing the progress and financial condition of the Maryland Tobacco Growers' Association, which condition has improved considerably in recent years. He also explained that in 1942 the Association was planning on building and operating

tobacco packing houses in Southern Maryland for the convenience of the tobacco growers who, due to labor and other current conditions, would not be in position to pack their own crops. He further forecast that due to priorities and Governmental regulations, farmers would be held closer to their farms, and in order to render them a real service, the Association planned to operate farmers' supply stores in conjunction with the packing houses.

Various charts presented showed that the Association distributes its income from operations to its membership each year, and it was explained that as the Association was a non-stock organization, the full income must naturally go back to its patrons.

Dr. F. B. Bomberger, President of the Baltimore Bank for Cooperatives, which bank finances the operations of the Association, called attention to the fact that the profits distributed by the Association were of a sufficient amount to interest its membership in patronizing their own organization, as such dividend distributions amounted to between $50,000 and $60,000 annually, which goes back to the tobacco growers in the five Southern Maryland counties. Dr. Bomberger stressed the fact that besides the dividend distributions of the Association, considerable work was done to benefit the farmers in the way of legislation, the establishment of markets, etc., which benefits do not show on the Balance Sheet of the organization, but do show in the prosperity and well-being of the tobacco farmers. He stated further that cooperation gives so much and asks so little in return, that it was inconceivable to him why all farmers would not clamor to join hands in a cooperative organization such as the Maryland Tobacco Growers' Association.

Mr. George I. Gardiner, Tobacco Salesman of the Maryland Tobacco Growers' Association, briefly outlined the activities of the Association over past years up to 1941.

Figures were quoted showing that it is definitely to the advantage and to the future security of the tobacco growers to stay with their organization and support it in the good work that it is doing to maintain the Baltimore tobacco market in preference to the loose leaf system of selling, which was inaugurated in Southern Maryland in recent years. Mr. Gardiner pointed out the economic advantages to the farmers as well as to the tobacco factories, by selling tobacco under the hogshead system. He stated that the decision as to whether Southern Maryland will operate wholly on the loose leaf market or under the hogshead system, rested entirely with the tobacco farmers, as the policy of the manufacturers was to purchase tobacco on any market that the farmer would offer his tobacco for sale. He also cautioned those present that the Baltimore market could remain open only if it received substantial support from the tobacco growers, and that it would be a sad day for them if their selling system should ever be 100% loose leaf, as such system never has and never will provide a satisfactory, safe and secure future for the tobacco growers of Southern Maryland.

Seventh Annual Summer Meeting

of the

Maryland State Poultry Council

State Teachers' College - Salisbury, Maryland

July 31, 1941

In opening remarks, President Harry H. Rieck called attention to the seriousness of the present emergency and pointed out that the grave international situation would probably have far-reaching influence on the poultry industry.

"The Present Status and Outlook for Labor for Poultrymen and Possible Future of Federal Labor Relief Projects" was discussed by Paul R. Poffenberger of the department of agricultural economics at the University of Maryland. He gave a thorough survey of the situation as it existed at that time, the work that was being done by a committee headed by P. C. Turner, president of the Farm Bureau, with Dr. S. H. DeVault as secretary, and the probable future of Federal relief agencies.

"The Poultry Industry and Food-For-Defense" was the topic of an address by W. D. Termohlen, chief of the poultry division of the Surplus Marketing Administration. He emphasized the importance of poultry products as food during the emergency and told of the production goals that had been set up. He said that a survey of the country showed there were available vacant housing facilities for taking care of more than a 10 percent expansion in laying flocks, and advised against over-expanding in new facilities. He told of the price-supporting measures provided for poultry products.

Dr. T. B. Symons, director of extension, University of Maryland, observed that recent expansion of the commercial broiler industry in this area at a time when eggs are most needed may presage future repercussions on the industry on the Eastern Shore. He referred to the vast volume of hatching eggs brought into this area from distant sources, and said that this situation involving the expenditure of vast sums of money not only presents a challenge to everyone in the industry but constitutes a situation of which the industry should be ashamed.

In an extemporaneous discussion, Leon Todd, managing director of the Northeastern Poultry Producers' Council, related efforts of that organization to secure the storage of government-held grains in eastern terminal elevators,

to be released later at prices which would exert a stabilizing influence on feed prices, thus maintaining a favorable situation for eastern poultrymen and livestock feeders. This program is now well under way, he said, and will be of vital importance to the welfare of the industry in the East. The demands for cargo space and rolling stock in the Defense Program will slow up transportation of non-defense materials, he pointed out, and the anticipation of requirements and advance orders for feed and other supplies to insure adequate supplies will become increasingly important.

MARYLAND FARMERS AND POULTRYMEN IN FOOD FOR DEFENSE PROGRAM

R. B. CORBETT, Director, Maryland Agricultural Experiment Station

The following is an abstract of an address by Dr. Corbett.

The Northeastern Dairy Conference feels that there are pressing problems facing agriculture that demand serious consideration and well-laid programs to meet them. With this thought in mind the Executive Committee established a special Emergency Defense Committee which met in New York on June 30. This Committee outlined what was considered to be the six important problems facing Northeastern dairymen, and asked for the opportunity of meeting with the leaders of the four most important national farm organizations to discuss these problems. It happens that these problems are of almost equal interest to poultrymen.

The first of these problems has to do with the representation of agriculture in Federal Defense organizations. For example, industry has its Knudsen, a direct representative from industry, uncontrolled by any forces except a desire to do the best defense job possible for the country and see that industry is given a fair place in the plans that are developed. Labor has its Hillman, uncontrolled except to do a patriotic job for the defense of the country and to see that labor is given its proper place in the sun. Can you name a single person who is in this same position for agriculture? All agricultural representatives are on the Federal payroll and are, therefore, controlled by certain other forces than the ones that control Mr. Knudsen and Mr. Hillman. It was the feeling of the group of leaders who met in New York on June 30 that agriculture should have representatives who were responsible only to agriculture for developing programs for national defense.

The second problem, and the one around which the most discussion took place, is that of fixing prices. As long as agriculture receives low prices compared with pre-war for the things that it sells and pays high prices for the things that it buys, there will be an agricultural depression. The great fear is that attempts will be made to freeze agricultural prices at these low levels and thus freeze agriculture into a permanent depression.

Agriculture is thoroughly convinced that its prices should not be fixed unless they are fixed at a point above so-called parity, and unless at the same time wages for labor are also fixed. You cannot have rising wage scales and not have

most other prices increase. Agriculture must take the position of having flexible agricultural prices, if other things, particularly labor rates, are to remain flexible.

The third point had to do with labor. Everywhere in the whole United States, agriculture, is having difficulty in obtaining labor at anything like the wages it can pay. We in the Northeast are particularly affected by this because of the competition of the many defense industries located in the 12 northeastern states. It happens that Maryland under the leadership of Mr. Phillip Turner, who as chairman of a Labor Committee working with farm organizations and the Extension Service, has done an outstanding job. It is felt, however, that agriculture should have a national program and that we should definitely develop in our national thinking the point of view that men working on farms are as important to the welfare of the country as are the men who are working in ship-building plants, aeroplane factories, ammunition plants, tank building, etc.

The fourth point recognized that the feed supplies in the Northeast will last our great poultry and dairy industries about ten days. It would not take very much of a breakdown in our milling or transportation facilities to cause a serious shortage of feed supplies on northeastern farms. It has been suggested that hard grains grown in the Northeast be stored on northeastern farms. It is not felt that this is sound, since practically all of the materials used are milled feeds. However, if it is possible to use feeds without milling, such a program should be developed and anything which will bring about the storage of greater supplies of milled feed on northeastern farms seems highly desirable.

The fifth point follows logically from the fourth. The reason that the Northeast has been able to go along with a ten-day feed supply is because of adequate transportation facilities. It now appears that adequate transportation facilities may not be available in the near future. Many of the important companies producing railway equipment are busy building tanks. The outlook for adequate transportation as the defense program develops is black, indeed. Thus, a program to insure transportation facilities so that northeastern dairymen and poultrymen may meet the requested increases in production for the defense program is one that needs careful attention and one which should be faced now rather than at the time when transportation has broken down.

The sixth and last point had to do with unity of defense programs in agriculture. It was the feeling that too many organizations are trying to run defense programs independently of others, and in some cases as if the main purpose is to give the organization a job to insure its survival, rather than the best possible defense of the country. Thus, the Emergency Defense Committee of the Northeastern Dairy Conference requested a program built by farmers from the ground up, rather than one which begins in Washington and emanates through many different sources leading to confusion and inefficiency.

I am happy to report that this Committee of the Northeastern Dairy Conference met with leading farm organization officials and asked that some-

thing be done about these six points. We found that on points 4 and 5, namely, feed supplies and the transportation problem, much had already been done. However, on some of the other points little has been done and much difficulty in accomplishing the aims was anticipated. The Committee was pointedly asked if the national farm leaders could count upon the backing of the northeastern farmers. The Committee's reply was that if the Northeastern farmers were informed of the problems and of what was being attempted, there was little question of their backing.

I have made this report to you since there may come a time in the near future when the national farm organizations will call upon all farm organizations in the Northeast to take a position on one or more of these problems. Thus, it is important that we keep them constantly before us, and that we are ready to make wise decisions in connection with them.

Last week, Dr. Symons, Dr. Welsh and I were taken to several farms growing broilers, to several hatcheries, and one of the two breeding flocks. Frankly, I was amazed at the size of the poultry industry on the Eastern Shore. I was particularly impressed with the advantages that Maryland seems to have over New England in the production of poultry. While our labor situation is bad, I believe it is better than in New England, and, all in all, when it comes to a competitive showdown, I should expect the Eastern Shore to survive where the tenacious, resourceful, hard-working New England Yankee would be eliminated, except for one thing. I understand that several of our hatcheries buy every egg they use from New England for hatching eggs each year. I am told that we do not have breeding farms that can adequately compete with the disease-free and efficiently handled breeding farms of New England. If rail facilities are impossible to obtain and gasoline consumption is curtailed, there will be a growing tendency for New England eggs to stay in New England rather than come to the Eastern Shore. It seems to me that if we are to feel safe in the continued development of our poultry enterprises, we must as quickly as possible develop adequate disease-free breeding flocks in Maryland. Undoubtedly, these flocks should not be developed in the midst of the broiler-producing section for disease reasons and others. Maryland must produce such flocks, if we are to forge ahead as a leading poultry state. If the New Englander with his disadvantages as to climate, soil, general layout, production of forage crops, and labor, can do what he has done, is there any reason why we cannot succeed here in Maryland?

THE ROLE OF PROTEIN SUPPLEMENTS IN POULTRY DIETS

Abstract of an address by C. W. SIEVERT

The proteins are the only nitrogen sources in the poultry ration, since the fats, fiber, starches, sugars and other energy-producing nutrients do not contain this necessary chemical element. But nitrogen itself, or its simpler compounds, is not enough. It must be present in the complex combinations that we know by the term protein.

A study of the proteins could be made a study of the amino acids. However, there are limitations to that approach to the subject, so it is probably better to stay away from too much technicality from that source.

Protein Levels for Chicks—Using protein mixtures of good quality, the minimum levels for good growth have been satisfactorily determined for chickens. Dr. Heuser of Cornell presented a review of this subject published in the July, 1941, issue of Poultry Science. The criteria considered in arriving at satisfactory protein levels are gain in weight, rate of gain, feed and protein consumption, cost to produce a unit of gain, influence on sexual maturity, feathering and general health.

When chicks are given free choice of feed, they select a ration containing 18 to 19 percent protein. A large number of experiments have indicated that the early rate of growth of chicks is increased when fed up to about 20 percent protein. Low protein feeding causes them to weigh less and have greater mortality. Some experiments indicate that protein levels over 20 per cent are satisfactory or even desirable. High protein levels have been shown to produce no injury, since the spleen, liver, heart and kidneys were not affected even when high levels were fed up to 38 weeks of age.

There are reports of feather picking, cannibalism and pick-outs in connection with low protein feeds. Slow feather development has also been correlated with the lower protein levels.

Australian trials have shown that the heavy breeds made more satisfactory gains when the higher protein feeds were used up to nine weeks, as compared with six weeks for Leghorns.

Cornell has shown that for early rapid growth the ration should contain approximately 20 per cent protein for the first month. This can be reduced 2 per cent for each succeeding month, but should never go much below 15 per cent.

There are some variations from these levels suggested by various investigators, some being higher, while others are lower. The Cornell recommendations are considered quite sound for fast growing birds.

It is doubtful whether the time that pullets begin to lay can be regulated appreciably unless the protein level is below the minimum and in that case growth is delayed. Delaying growth in this manner is a very questionable practice.

Heuser also says, "There are many advantages of securing early rapid growth (which is the normal condition), such as maintained vitality and body reserve, earlier broiler marketing, and sufficient weight of pullets at time of laying to induce good production and egg size.

Protein Levels for Hens

Insufficient protein results in decreased egg production, lower body weight and smaller egg size.

Much work has been done by many experiment stations using various protein levels. Levels below 14 per cent were practically always found to be too low. Under practical conditions it is well to provide a diet containing at least 15 per cent protein for the total ration.

For the production of hatching eggs, low protein rations give low hatchability. Generally speaking, the use of vegetable protein concentrates has not been as satisfactory as those from animal sources.

It has been shown that hens can tolerate rations containing as much as 30 per cent protein when the necessary vitamin and other nutrients are supplied. The real practical reason for making poultry feeds not so high in protein is because protein is comparatively expensive as an energy-forming feed and, consequently, most feeds are so formulated as to contain the minimum quantities.

If poor quality proteins are used, then a somewhat larger percentage will be necessary. For example, if a diet is made entirely of grain sources of protein, then quite a bit more protein would have to be provided. When the grains and grain products usually used in poultry feeds are supplemented with meat, fish and milk, then the above-noted percentages are fully adequate. Soybean oil meal may be used in place of part of the meat or fish. Under some conditions it may be possible to use relatively large amounts of soybean oil meal, and even displace meat and fish entirely, but under practically all production feeding conditions soybean oil meal should not be used quite so extensively. The recommendation to limit soybean oil meal usage to displace one-third, or at the most one-half, of the meat and fish is very sound.

Protein Supplements

The most used products are meat scraps, fish meal, dried milk and soybean oil meal. To this list may be added peanut oil meal and corn gluten meal. Cottonseed oil meal and linseed oil meal are sometimes used.

Meat scraps, or meat and bone scraps, is a dry rendered by-product of the meat packing industry. This product also contains some bone meal, and usually we find that the 50 per cent protein product contains an appreciable amount of bone meal. It must then be listed as meat and bone scraps. The 55 per cent protein product is usually listed as meat scraps. It contains some bone meal also, but not enough to make it legally necessary to make mention of the bone. This product has long been used in poultry mashes and in most parts of the United States is the most extensively used protein concentrate.

Fish meal is a very good protein concentrate, when of good quality. Differences in quality depend on kind of fish used, but more often on the process of drying and freshness of the fish before drying.

Experiments have shown that mixtures of meat scraps and fish meal produce results that are usually better than when either product is used alone. By results I mean not only growth or production of the birds, but also the cost of a unit of production and the health of the birds.

Dried milks—dry skim milk or dry buttermilk—have been used as protein sources in poultry feeds for many years. During the last ten years it was found that these milk products are also excellent vitamin sources. Con-

sequently, some folks, with more or less of a one-track mind have tried to represent dried milk as a vitamin source primarily and have chosen to forget that these milk products are the highest quality protein source used in feeds. The high digestibility, the high biological value and the great supplementary effect of milk proteins should not be overlooked. Alone or in combination with meat or fish, or both, the milk proteins are very valuable and contribute much to the success of poultry feeds.

Soybean oil meal as now made is the most satisfactory protein source of vegetable origin. It may be used to supply one-third to one-half of the protein concentrates in the ration with good results. It is palatable and quite generally available and is quite popular. It mixes well with meat, fish or milk and the combination of all four of these protein concentrates is hard to equal.

Peanut meal made from the shelled nuts is a high-grade protein supplement for all farm animals. For poultry it ranks below soybean meal as a protein source, but is considered better than the other vegetable protein sources.

Corn gluten meal is a high protein material of vegetable origin. Its protein is derived from corn and is of excellent quality for ruminants. Corn protein is not as complete as the animal proteins and it should not be used too extensively when feeding chickens. It is possible to use a moderate amount of corn gluten meal in mash feeds as long as a good proportion of milk, fish and meat proteins are provided.

Linseed oil meal is a valuable protein source for ruminants. For poultry it is used in relatively small amounts. Large amounts of linseed meal are apt to bring about too great a degree of laxation, but in many formulas a small amount of linseed meal is a good addition.

Cottonseed meal is used in some chick feeds in the South with good results where moderate amounts are used. Because of unfavorable effect on the storage quality of eggs, cottonseed meal is sparingly used in egg mash, if at all.

Vitamins and Minerals in Protein Concentrates

These protein supplements also contain vitamins and other nutrients. In choosing suitable protein supplements, consideration may be given to these other nutrients also. Here is a list of what they contain.

Meat scraps contain 55% protein, 8.25% calcium, 4.0% phosphorus, 180 International Units of vitamin B per pound, 3,000 micrograms of riboflavin and about 1,250 micrograms of pantothenic acid per pound.

Fish meal contains from 57 to 67% protein, from 5 to 9% calcium, from 2.5 to 4.5% phosphorus, about 140 International Units of vitamin B (thiamin) per pound, from 2,250 to 4,200 micrograms riboflavin, and about 1,250 micrograms of pantothenic acid per pound.

Dry buttermilk and dry skim milk contain from 32 to 35% protein, 1.3% calcium, 1.0% phosphorus, from 130 to 200 International Units of vitamin A and 450 to 500 International Units of vitamin B (thiamin). Dry skim milk contains approximately 9,000 micrograms of riboflavin, and 15,750 micrograms of pantothenic acid per pound. Dry buttermilk contains from 9,000 to 12,000 micrograms of riboflavin and about 19,000 micrograms of pantothenic acid per pound.

Soybean oil meal contains 41 to 44% protein, .30% calcium, .70% phosphorus, 170 International Units of vitamin A, 1,600 International Units vitamin B (thiamin), approximately 1,500 micrograms of riboflavin and 6,300 micrograms of pantothenic acid per pound.

Peanut oil meal contains about 45% protein, .20% calcium, .60% phosphorus, 250 International Units vitamin A, 900 International Units vitamin B (thiamin), 1,200 micrograms riboflavin and 25,000 micrograms of pantothenic acid per pound.

Experience Necessary to Make Good Feeds

These figures give us something comparative, and yet figures alone do not prove a satisfactory ration. At a recent meeting of the American Chemical Society in St. Louis, Dr. Elvehjem of Wisconsin in speaking of human diets said: "However, we as chemists must recognize that there is more to nutrition than the mere combining of the known compounds into a diet and the calculation of the cost of these dietary constituents." A little over two years ago, Dr. Mitchell of Illinois in speaking of feeds for farm animals said: "The nutritive properties of individual feeds are not additive when they are combined into rations, because of the associative effect of feeds in digestion and their supplementary effect in metabolism."

Calculating the necessary levels of the various nutrients can be done to a certain extent, but that still does not furnish all the information we need or want. If we get down to serious figuring, we must admit that we cannot calculate several of the things we would like to know. We still have to try it on the animals. So, the safe thing to do is to stick to the recommendations that result from years of experiments and experience in the feeding of chickens.

MARYLAND LIVE STOCK SANITARY SERVICE
POULTRY DISEASES

The following charts show the diagnostic and disease control work done by the Maryland Live Stock Sanitary Service in helping the poultrymen of the State. The Parasitic, Infectious Diseases, Nutritional and Poisoning Groups (constituting 67% of the total) can best be prevented or controlled through proper management, feeding and sanitation.

Pullorum testing, in the past 7 years, has increased over 700%, yet, despite the large number of new flocks under test, the infection rate has been reduced to 3% of the birds now under supervision.

It is often impossible to distinguish one disease from another by an autopsy alone, and frequently it is most difficult, even with the best of laboratory equipment used by well-trained pathologists. Yet, an accurate diagnosis must be made before intelligent treatment or corrective measures can be used profitably.

Unsolved poultry disease problems cost the producers enormous sums each year and an increased research program is now being started with the hope of finding a satisfactory solution to certain of them.

To assist poultrymen and livestock owners in reducing losses or protecting their investments, the Live Stock Sanitary Service maintains diagnostic and research laboratories at Salisbury, Centreville, Baltimore, and College Park.

COMPOSITE SUMMARY OF DIAGNOSES OF POULTRY DISEASES FOR THIRTEEN YEARS BY MARYLAND LIVE STOCK SANITARY SERVICE LABORATORIES

Classification		Number Birds	Number Flocks	Type of Disease
Infectious diseases due to	Filtrable Virus	585	262	Fowl Pox, Laryngotracheitis
	Specific Bacteria	4,541	1,153	Fowl Cholera, Fowl Typhoid, Pullorum, Aertrycke and Tuberculosis.
	Non-Specific Bacteria	152	53	Air Sac and Ear Infections
	Fungi	76	25	Aspergillosis
Non-infectious diseases of the	Digestive System	1,355	439	Gastritis, Enteritis, Proventriculitis, Impaction
	Reproductive System	222	173	Ruptured Ova and Oviduct, Prolapse & Impaction Oviduct
	Circulatory System	50	43	Internal Hemorrhage, Pericarditis, Myocarditis
	Respiratory System	688	159	Bronchitis, Pneumonia
	Other Internal Organs	1,335	435	Hepatitis, Nephritis, Splenitis, Abdominal Cyst
Parasitic and Protozoan Diseases		7,435	3,412	Round, Thread & Tapeworms, Lice, Coccidiosis, Blackhead
Nutritional Disease		1,218	381	Rickets, Gout, Nutritional Roup, Slipped Tendon
Diseases due to Poisoning		324	172	Botulism, Ergotism and Metallic (Lead, Zinc)
Miscellaneous		2,616	1,428	Leukemia, Injury, Tumors, Cannibalism, Abscesses
TOTALS		20,547	8,135	Not including Pullorum Blood Testing

FOURTEEN-YEAR RECORD OF PULLORUM DISEASE BLOOD TESTING CONDUCTED UNDER THE SUPERVISION OF THE MARYLAND LIVE STOCK SANITARY SERVICE

Year	Number Flocks	Number Birds	Per Cent Positive
1927–28	3	3,725	21.0
1928–29	16	5,805	19.0
1929–30	16	6,032	10.0
1930–31	38	12,433	17.1
1931–32	79	29,432	13.0
1932–33	369	81,275	18.2
1933–34	326	89,991	9.2
1934–35	209	59,833	6.1
1935–36	468	100,996	8.8
1936–37	655	207,991	8.0
1937–38	855	251,052	8.7
1938–39	942	308,681	7.2
1939–40	1,453	455,647	6.1
1940–41	1,332	431,503	3.0

Business Session

Because of the lateness of the hour, the credentials committee reported by roll call of voting delegates and directors of organizations, with the following organizations represented:

Westminster Cooperative Poultry Auction
Maryland Turkey Producers' Association
Tri-County Poultry Association
Dorchester County Poultry Association
Talbot County Poultry Association
Caroline County Poultry Association
Cecil County Poultry Association
Harford County Poultry Association
Prince George's County Poultry Association

Treasurer, Mrs. W. W. Hopkins, reported receipts in 1941 to date of $1,006.14 disbursements of $298.00, leaving a balance of $708.14 in the treasury as of this date. Moved by Mr. Peterson, seconded by Mr. Fuller, that the Treasurer's report be accepted. Motion carried.

Old Business: The matter of revisions of standing committees and appointment to the revised committees was discussed by the President, who stated he would announce these changes and appointments later by mail.

L. E. Downey made a brief informal report on Fresh Egg Law Inspections and activities including a report on one conviction in court for repeated violations.

FRESH EGG LAW ACTIVITIES

	Total 6 Months 1941	Percent 6 Months 1941	Total 1940	Percent 1940
No. of Inspections	2,021	.....	1,440	.....
Passed	647	32%	451	31%
Doubtful	1	.....	4	.....
Failed	543	26.8%	386	26.8%
Non-Fresh	655	32.4%	498	34.5%
Part Passed	175	8%	101	7%
Meat	119	5.8%	115	7.2%
Grocery	207	10.2%	257	17.7%
Meat and Grocery	1,473	72.8%	847	58.8%
Super Market	59	2.9%	63	4.3%
Farmer's Market	56	2.7%	36	2.5%
Delicatessen	24	1.8%	41	2.8%
Roadside Market	23	1.1%	34	2.3%
Home Sale	64	3.1%	47	3.3%
Jobber	1,143	56.6%	835	57.9%
Producer	887	43.8%	605	42%

RESOLUTIONS

1. Whereas the Maryland State Poultry Council is indebted to J. P. Brown, County Agricultural Agent of Wicomico County, for his cooperation in providing meeting places for the Council and its committees,

Therefore, Be It Resolved that the Secretary of the Council be requested to express to Mr. Brown the thanks of the Council for his splendid services.

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2. Whereas the officials of the Maryland State Teachers' College were kind enough to place the facilities of the College at the disposal of the Maryland State Poultry Council for its annual summer meeting,

Therefore, Be It Resolved that the Secretary of the Council be directed to express to Dr. Blackwell and his associates the thanks of the Council for their splendid cooperation in making the meeting such a success.

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3. Whereas the members of the Maryland State Poultry Council are very appreciative of the excellent luncheon served by the Women's Auxiliary of the Asbury Methodist Church of Salisbury,

Therefore, Be It Resolved that the Secretary of the Council be directed to write Dr. Fox and the Women's Auxiliary of the Asbury Methodist Church thanking them for their hospitality in making the luncheon such a success.

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4. Whereas the Maryland State Poultry Council fully appreciates the fine cooperation of the officers of the Tri-County Poultry Association in making arrangements for the annual summer meeting of the Council,

Therefore, Be It Resolved that the Secretary of the Council be requested to thank Robert C. Street and Robert B. Pusey, Jr. and the other officers of the Tri-County Poultry Association for their spirit of cooperation in making this annual summer meeting of the Council such a success.

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5. Whereas the Maryland State Poultry Council most thoroughly appreciates the valuable services rendered to the Poultry industry of the State by Dr. T. C. Byerly, who has recently gone with the Federal Government, and Prof. J. M. Gwin, who has recently joined the Army,

Therefore, Be It Resolved that the Secretary of the Council be directed to express to Dr. Byerly and Prof. Gwin the thanks of the Maryland Poultry Industry for their valuable services.

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6. Whereas the Poultry Department of the University of Maryland is greatly affected by the loss of Staff Members and the temporary interruption of important work on behalf of the Poultry Industry of the State,

Therefore, Be It Resolved that the President of the Maryland State Poultry Council be directed to write the President of the University, Dean of the College of Agriculture, and Director of the Experiment Station urging that everything possible be done to maintain the high caliber of the personnel of the Poultry Department in order that it may continue to serve the poultry industry with the greatest possible efficiency.

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7. Whereas eggs and poultry have been recommended by the Federal Government as food commodities that should be increased from the standpoint of providing adequate nutrition in the program of National Defense,

And, whereas the poultry industry of Maryland is the second most important agricultural industry in the State,

And, whereas the poultry industry is deserving of greater consideration and support by the Governor than it has received in the past

Therefore, Be It Resolved that Governor Herbert R. O'Conor be urged to be much more liberal in the future in making the necessary funds available for needed improvements of conditions in the industry.

Mr. Snoddy moved, Mr. Peterson seconded, that the resolutions be adopted as a whole. Motion carried.

Meeting adjourned.

Eighth Annual Winter Meeting
of the
Maryland State Poultry Council

Baltimore, Maryland - January 7, 1942

The meeting convened at 9:15, with President Harry H. Rieck presiding. He presented as the first speaker John W. Magruder, Extension Agronomist of the University of Maryland.

FERTILIZATION AND SOIL TREATMENT OF LADINO CLOVER AND OTHER PLANTS FOR POULTRY RANGES

JOHN W. MAGRUDER, Extension Agronomist, University of Maryland

Plants commonly used for poultry ranges may be grouped in three classes; those more or less permanent in nature, plants which grow two or more years, and annual plants.

Kentucky bluegrass and wild white clover are the principal plants used for permanent ranges. They are adapted to fertile, well-drained loam, silt loam and clay loam soils. They do not survive well on sandy soils because of the low capacity of such soils for holding moisture and fertility, and their high temperatures.

Range plants that are productive for two or more years also grow best on soils just described, but with proper fertility treatment and management they may be induced to grow on lighter-textured soils. Ladino clover, alsike clover, timothy and perennial ryegrass are some of the important plants in this group.

Oats is one of the most dependable annual range crops for sandy soils, particularly where the fertility is relatively low and the acidity high. Sandy

soils with medium fertility and moderate acidity may produce satisfactory Korean lespedeza, soybeans or domestic ryegrass.

Ladino clover

Some poultrymen have become interested in Ladino clover for their poultry ranges in recent years because of the heavy yield of tender, succulent herbage it is capable of making. Ladino clover is the largest of the common types of white clover and is a long-lived perennial. In Maryland, it will usually persist for from 3 to 5 years with careful management.

Experience in the use of Ladino clover for poultry ranges in Maryland has not been sufficiently extensive on which to make definite recommendations concerning range management. Generally, this plant will not stand continuous intensive defoliation as will Kentucky bluegrass and wild white clover. Present information indicates that either the birds should be rotated from one area to another throughout the growing season, or the number ranging on a given area should be limited to permit some foliage to nearly reach maturity, thus requiring an occasional clipping.

An annual treatment of 400 pounds per acre (10 pounds per 1,000 square feet) of 0-14-6 fertilizer for medium to heavy soils, and 0-12-12 for lighter soils is recommended for maintenance. The fertilizer may be applied in early fall or early spring.

Further information concerning the culture of Ladino clover may be secured by requesting Agronomy Department, Mimeo. 18.

Lime

In establishing or improving a poultry range, generally the lime needs should be supplied first. Soils at pH 6.0 to 6.5 respond best for most range plants. When the acidity is pH 5.5 or lower an application of lime is certainly of first importance. Your County Agent or the Soils Laboratory, College Park, Maryland will test soil samples from your range. Directions for taking samples and sheets on which to indicate the past history of the soil may be secured upon request.

Single lime applications should seldom exceed 3,000 pounds per acre when ground limestone is used on silt loam soils, 2,000 pounds per acre for loam soils, and 1,500 pounds for sandy loam. For small ranges these quantities would be 75 pounds, 50 pounds and 25 pounds per 1,000 square feet, respectively. When other forms of lime are used, the amount should be based on an equivalent amount of calcium oxide and magnesium oxide. Lime may be applied at any time during the year but fall or spring applications generally are preferred.

Fertilizer

Poultry range plants should be tender, succulent, palatable and high in minerals and vitamins. One of the chief benefits derived from fertilization is the production of such herbage.

In establishing poultry ranges plenty of plant nutrients should be supplied to assure a thrifty sward. Humus is important and may be supplied by green manure or by use of well-rotted barnyard manure.

For permanent or semi-permanent poultry ranges 800 to 1,000 pounds per acre (20 to 25 pounds per 1,000 square feet) of 3-12-6 fertilizer or a similar grade is recommended at the time of seeding. Fertilizer should be harrowed or raked in.

The range can be maintained in a thrifty condition by an application of fertilizer once every three years when the type of management practiced is favorable for leguminous plants. An application of 800 to 1,000 pounds per acre (20 to 25 pounds per 1,000 square feet) of 0-14-6 fertilizer in early fall once every third year is recommended.

On ranges where legumes are not present to supply nitrogen to the soil, annual applications of 400 pounds per acre (10 pounds per 1,000 square feet) of 6-8-6 fertilizer in the early spring, about the time growth starts, is recommended.

Annual legumes and grasses generally respond well to 400 pounds per acre of 3-12-6 fertilizer.

Management

The herbage from permanent range plants must be consumed by poultry while young and tender; otherwise, it becomes high in fiber and unpalatable. When more herbage is available than the birds can consume, provision should be made to clip the sward. Failure to do this may result in the grasses shading out the wild white clover, thus creating conditions favorable for the introduction and increase of weeds and less desirable grasses.

SUCCESSFUL MARKETING OF EGGS IN THE NORTHEAS'

RUSSELL C. HAWES, Marketing Specialist
University of Maryland

All of the Northeastern States have fresh egg laws. They may differ slightly from the Maryland Fresh Egg Law, but, in general, are similar in scope. The purpose of any fresh egg law is three fold. It is an aid to the producer, a benefit to the retailer, and a protection to the consumer.

For a consumer to be able to buy eggs as "fresh," the producer must assume a great deal of the responsibility. The marketing of fresh eggs begins with the producer. Man is unable to improve the quality of a new-laid egg, but it is within the power of man through breeding and management to make possible the production of high quality eggs. It is certainly within the power of man to improve greatly the collecting, holding, candling, and marketing practices so that the original high quality may be retained through to the consumer.

Competition in eggs is becoming keener every day. Eggs are received in the Baltimore market from many sections of the country. 27 states shipped eggs to Baltimore during 1940. Total receipts amounted to 547,035 cases or approximately 1,368 car-loads. During recent years producers of eggs in the middle-western states have greatly improved their method of production, more care is being given to the eggs, grading is a common practice, and improved transportation facilities have enabled these producers to place high quality eggs in our Maryland markets. To meet this ever-increasing competition, it is necessary that Maryland producers do all in their power to put into the market the very best, carefully graded eggs that it is possible for them to produce.

According to the U. S. D. A. Agricultural Marketing Service, during the month of November, 1941, there were 2,542,000 layers on hand in Maryland that produced 18,000,000 eggs. From January 1 to November, inclusive, they produced a total of approximately 900,000 cases of eggs and figuring an average price of $8.00 per case amounts to $7,200,000 for the 11 months of 1941. This amount added to income received from the immense broiler industry, sale of chicks, poultry meat and poultry products consumed on farms, places the poultry industry in Maryland close to the top as one of the leading branches of agriculture.

With the passage of fresh egg laws throughout the Northeast, the quality of the bulk of the eggs sold in our markets has been raised. Producers should always keep in mind that eggs are a delicate and perishable food product, subject to rapid deterioration, susceptible to unfavorable surroundings, and liable to injury or loss by breakage. We are all working for "Food for Defense." We must prevent waste. Waste in the marketing and consumption of farm products reaches an enormous total each year. Wastes restrict the diets of consumers and increase the spread of marketing costs between farmers and consumers, obliging consumers to pay more at retail and returning lower prices to producers.

Poultrymen who are willing to produce eggs under good conditions will have no difficulty in marketing their eggs under the fresh egg law. Prices received for quality eggs have consistently topped the city markets, which is proof that the average consumer is willing to pay for a high quality product properly supervised.

The purpose of any fresh egg law is to protect both consumers and retailers of eggs. To use the term "fresh" is to describe a standard of quality. For a number of years many retailers have been successful in selling high quality eggs as "fresh." The selling of inferior quality eggs as "Fresh," "Nearby," "Selected," "Hennery," "Day Old," etc., has been eliminated because of the fresh egg laws which protect the use of the word "fresh." This has helped the retailer in selling high quality eggs, as it has eliminated unfair competition. It also has protected the consumer in that she has been able to obtain an egg of desirable quality and at a price commensurate with the quality. New customers are obtained by making a special effort to sell fine quality eggs, properly labeled, while some customers may be lost by selling eggs of unknown or poor quality under descriptive terms. The law boils down to "Truth in

advertising." The person doing a legitimate business should welcome with open arms an inspector. Only those who are misrepresenting their product, selling eggs under some high-sounding term that is misleading to the consumer and creating unfair competition with their neighboring stores, need to fear the law.

The various enforcement departments of the Northeast have asked and received cooperation from all members of the egg distributing trade in the enforcement of the law. Since the law was designated also to protect the consumer in the purchase of eggs, most of the departments' efforts have been devoted to inspection of eggs offered for sale in retail stores, at roadside stands, and on delivery routes. When feasible, inspections are made in wholesale lots. Full compliance with the law will encourage consumer confidence in Maryland eggs, increase the per capita consumption of eggs, and will go far towards discouraging the shipments of a low quality poultry product from other territories.

The retailer of eggs is charged with a great responsibility. It is he who must act as a distributor for many Maryland poultry producers and much of the response that consumers make in the purchase of eggs is dependent on his ability to deliver products of the highest quality. Eggs are extremely perishable and vary in quality as much as any food the grocer sells.

There is no more perfect food than a fresh egg, but many retailers do not give as much thought or care to the handling of fresh eggs to keep them "fresh" as they give to the handling of butter, meat, fruits, vegetables, or other highly perishable products. One of the greatest fallacies regarding eggs is the idea that age may be taken as an indication of their interior quality. A comparison of the interior quality of eggs kept in a mechanical refrigerator and on the floor of a store was made by the New Jersey Department of Agriculture. On the sixth day only 55 percent of the eggs candled from the floor group met the requirements of the fresh egg law, while at the end of the eighth day, 95 percent of the eggs held in the refrigerator met the interior quality of the law. The refrigerator is the proper place in which to keep eggs from the time they are received until sold. A few sales may be lost by not having eggs displayed on the counter. This loss has been overcome by placing about three cartons of eggs on the counter for immediate sale, or by arranging a display of empty cartons on a desirable counter space.

Fresh egg laws in the Northeast are working out very satisfactorily to the benefit of the producers, trade, and consumers. All enforcing agencies report a fine spirit of cooperation and compliance with the law. Many states report a lack of understanding prevailed among retailers following the passage of the law but through education and demonstration they now have confidence in the administration.

The principal function of the administration in administering a fresh egg law is education and cooperation. Strict policing will not bring the desired results. The Vermont Fresh Egg Law went into effect a month earlier than the Maryland law but through devoting considerable effort to educational work in informing retailers of the nature of the law, compliance and cooperation

"have been universal. The Director, Division of Markets of Vermont, reports, "We have never had a court case. We believe the retailers have become very much fresh egg conscious and are steadily improving in their handling methods with the idea of preserving as well as possible fresh egg quality. Our poultrymen are becoming very enthusiastic about the result of the Fresh Egg Law and the way it has been administered. The law has driven the non-fresh into the background and has very satisfactorily eliminated the common practice of representing non-fresh eggs as fresh. Calling the offender to a hearing before our Commissioner has apparently been sufficient to correct difficulties." In many of the states of the Northeast, violators of the fresh egg laws upon their first offense are given a hearing before the Commissioner of Agriculture, or some designated party. This is a very good procedure because it brings the offender and prosecutor together in a semi-official way, whereby, through the exchange of ideas the misunderstandings and differences may be satisfactorily ironed out. The offender leaves with a better understanding of the purpose of the law and generally because of the inconvenience and loss of time involved, vows there and then, to conform to the law.

Retailers and retail distributors have made marked advancements in recent years in the handling of eggs. Perhaps the most important change is that of cartoning the eggs by the distributor or in the warehouse by the larger retailers. This practice not only eliminates one process but it protects the eggs until the consumer uses them. Another improvement is the stamping of the cartons with some sort of identification to be able to check on date of arrival. Another notable change is in delivery. Many stores receive eggs three times a week, while it is possible for the larger stores to receive them four, five, or six times a week. Refrigerator space is being increased in stores. Formerly the refrigerator was in the rear of the store and dimly lighted. Now it is being placed in the front of the store, well lighted, and literally "under the noses" of the customers. Continual improvement is spurred on by competition from peddlers and egg producers who retail direct and has made retailers, both large and small, more conscious of the necessity of keeping eggs turning over more often and reducing deterioration caused by handling and other factors.

Retailers should make good use of the egg inspectors. While all enforcing departments of the Northeast have a regulatory function to perform, they also have a policy which is educational in nature. Their inspectors could carry out their daily duties by just reporting instances of non-compliances with the Fresh Egg Law. This procedure is not in harmony with the policies of the Northeast. The egg inspectors are instructed to be of assistance in determining where the difficulties are and then make recommendations on how to eliminate such difficulties. If there are any misunderstandings about the law, an effort should be made by the inspector to clear them up. Retailers should have the inspectors point out factors that determine egg quality.

According to a study of the Baltimore market published by Cron, Burdette, and DeVault in 1939, Maryland produced 29 million dozen eggs, or .93 percent of all eggs produced in the United States in 1937. The study states, "Average annual per capita consumption of eggs in Baltimore is approximately 20 dozen." In a recent publication put out by the U. S. D. A., the per capita

consumption of eggs in the United States for 1940 was 38.8 lbs. or approximately 26 dozen per capita. If we could increase the per capita consumption of the approximately one million people in Baltimore six dozen eggs, we would add around one and one-half million more dollars to the poultry business annually. How can we do it? My answer is, by placing a high quality product on the market and then telling the world about it. The hens have been cackling right along. The poultrymen haven't.

Finally, it has never been the intention of the sponsors to have any of the fresh egg laws retard the sale of good "fresh" eggs within their states. The future value of the Northeast's fresh egg legislation lies mainly in the ability of the enforcing agencies to keep quality standards high enough to protect the better grade of eggs and yet make the laws commercially practical.

BUSINESS SESSION

President Rieck, in referring to the work of the Northeastern Poultry Producers' Council, stated that services worth many times their cost were being rendered Northeastern poultrymen, and the contribution by Maryland to this work was insignificant in relation to returns received.

A recent program of contributions to enable individual producers to support this work has been worked out on the basis of $1.00 per year for flocks of 1 to 1,000 birds and $5.00 per year for flocks over 1,000. Support must be given this program to insure a continuance of the good work of NEPPCO.

In respect to the State Council, the President pointed out that absolutely no one draws personal remuneration from the Council treasury. A budget of about $500 a year is required to finance the Council's activities. This obligation must be met through associate, sustaining, and affiliated memberships and other sources of revenue if poultrymen of the state are to continue to benefit by the Council's program. Consideration of sustaining memberships as a source of revenue was recommended to the Finance Committee.

Report of the Credentials Committee showed both delegates and directors present from Caroline County, Dorchester County, Talbot County, and Directors present from Prince George's, Tri-County and Cecil County Associations.

Treasurer's Report

Treasurer Hopkins reported total receipts of $1,157.14, and total expenses of $518.67, leaving a balance of $638.47 in bank.

Mr. Duvall moved, Mr. Peterson seconded, that the Treasurer's report be accepted. Motion carried.

The Secretary, for Chairman R. C. Street, of the Auditing Committee, who had to leave previous to the Committee's report, read a report of that Committee that treasurer's accounts were found in order.

Mr. Peterson moved, Mr. Duvall, seconded, that the Auditing Committee report be accepted. Motion carried.

Report of Executive Committee

By H. H. RIECK, President
W. H. RICE, Secretary

The year 1941 has been one of many developments affecting the poultry industry in a variety of ways.

Following a period of relatively unfavorable feed-egg and feed-meat ratios up until April 1941, the advent of the Lease-Lend program, and subsequent Defense Program developments, have all served to cause a series of mixed feelings among poultrymen. As a consequence, many of the poultry problems of the present are deeply rooted in the present political and economic aspects of a world at war.

These aspects have dominated the principal activities of the Council during the past six months.

Maryland Poultry Defense Committee: With the development of the principle of priorities for materials essential to the Defense Program by the Office of Production Management, necessitating the discovery of ways and means to insure supplies of feed and materials necessary to produce the eggs and poultry meat requested by the Government for Defense purposes, the development of State, Regional, and National Poultry Defense Committees became an order of the day.

In view of these developments, your officers selected personnel of a Maryland Poultry Defense Committee, which are as follows:

MARYLAND POULTRY DEFENSE COMMITTEE

Egg Producers

J. W. SNODDY, Riverdale — W. A. SPEARIN, Salisbury

Broiler Producers

H. H. RIECK, Preston–Act. Chairman — ROLAND W. BEAUCHAMP, Bishop

Breeders

SAM RICE, Ashton — MRS. A. W. SATTLER, Monkton

Hatcherymen

CLARENCE E. STREET, Rocks — E. F. HASTINGS, Parsonsburg

Equipment

C. A. SCOTT, Beacon Steel Prod. Co., Westminster — FRANK R. PARKER, Salisbury

Feed Manufacturers

P. W. CHICHESTER, Frederick — D. A. QUILLEN, Berlin Milling Co., St. Michaels
SEN. DUDLEY G. ROE, Sudlersville

Educational and Regulatory

W. H. RICE, Act. Sec., College Park
Dr. M. A. JULL, College Park
L. E. DOWNEY, College Park
CHAS. S. WILLIAMS, College Park

Cooperatives

RAY RILEY, Westminster
Manager, Southern States Coop., S. Hanover St., Baltimore

Sales Agencies

J. R. EDDINGTON, Federalsburg
GLENN COWLES, Salisbury
C. R. PRUITT, Berlin

This Committee, meeting at Salisbury, Md., on July 30, reviewed many problems arising from the priorities scheme, including feed supplies and prices, metals, transportation, electrical energy, incubators, brooders, and other equipment essential to the normal operations of Maryland poultrymen.

Recommendations were drawn up and submitted to the Northeastern Poultry Defense Committee, and through them to the National Poultry Defense Committee, thence to Government agencies in Washington.

As a result of the activities of these Committees, it now seems assured that the importance of the role of our poultry industry in our Defense and War program is well appreciated by our government, and provisions are being made to insure feed and other supplies essential to producing the additional poultry and eggs for the war effort.

NEPPCO Exposition and Meeting: The 1941 Exposition and Meeting of NEPPCO at Harrisburg, Pa., October 5-8, was in many respects the most successful of these events yet held.

The DefenseProgram naturally dominated meetings and discussions, and a meeting of the National Poultry Defense Committee was held at that time, followed by conferences in Washington with government officials on various problems involved.

Labor conditions reduced attendance at NEPPCO in 1941. Commercial exhibitors reported excellent business. Maryland's exhibit featured the broiler industry of the State and attracted considerable attention.

Attendance of Maryland producers was very good, considering labor shortages on farms. Maryland was represented by about 75 producers, a 4-H Judging and a 4-H Demonstration team, in the various activities.

The 1941 Exposition and Meeting of NEPPCO amply demonstrated the justification of the investment of time, effort, and money on the part of the poultry industry of the northeast, including Maryland.

Baltimore Food Show: An attractive exhibit featuring the broiler industry of Maryland was prepared by the University for the Baltimore Food Show. This exhibit was designed primarily to interest Baltimore consumers in the consumption of fresh-killed Maryland broilers, secured through established trade channels.

The Maryland Turkey Producers' Association cooperated in this exhibit through an exhibit of Sho' Nuf Genuine Maryland turkeys, portraying the marketing plan of the Association under official inspection of market birds.

The chance games operated at the Food Show were the dominating feature of the Show and it appears that a scheme of distributing samples or favors in connection with a poultry exhibit is necessary if the poultry exhibit is to attract its share of attention of the people attending the show.

1942 Yearbook: Despite some administrative difficulties in handling year book matters, the officers have been able to issue a very creditable 1942 Yearbook with good advertising support. With 53 advertisers in the book, a net income of about $300 or more should be realized for the Council from this project after all collections and expense items are taken care of.

Legislation: The Council officers have been watching reaction to Fresh Egg Law enforcement in Maryland, particularly the reported unfavorable reaction by Independent Retail Grocers' Association and the disappearance of signs in Baltimore advertising eggs as fresh. It is the feeling of the Council officers that such reported developments are the result of a lop-sided program of Fresh Egg Law work; namely, inspections to enforce compliance—with little or no promotional and educational work. It is felt that the Department of Markets, in work under the Fresh Egg Law, has been weak in promotional and educational work and steps are being taken to improve and strengthen the educational work under the law.

Mrs. Hopkins moved, Mr. Peterson seconded, that the Executive Committee report be accepted. Motion carried.

Resolutions of the Maryland State Poultry Council, January 5, 1942

Resolution I.

Whereas eggs have been prescribed as a very important factor in a well-balanced diet for humans,

And whereas increased egg production has been requested in order to provide U. S. civilians with enough eggs for proper nutrition and for the enlarged U. S. Army, as well as enormous quantities for the British,

And, whereas the poultry improvement work carried on under the supervision of the Maryland Poultry Improvement Board is planned to improve the laying qualities of farm and commercial flocks and to improve the quality of chicks produced by Maryland hatcheries,

Therefore, Be It Resolved that the Maryland State Poultry Council request the Governor of Maryland and the State Legislature to provide more funds for carrying on the work of selection, breeding, and inspection of flocks and hatcheries in Maryland in order that Maryland farmers may receive a larger share of the enormous sums of money sent out of the state annually for hatching eggs and baby chicks.

And Further, Be It Resolved that a copy of this resolution be sent to the Maryland Farm Bureau.

Resolution II.

Whereas the success of the meeting has been due very largely to the excellent addresses by the speakers on the program,

Therefore, Be It Resolved that the Secretary of the Maryland State Poultry Council be requested to write Dr. T. C. Byerly, H. L. Schrader, Russell Hawes, J. W. Magruder, Dr. Mark Welsh and his associates, expressing the thanks of the Council for their splendid service and sound advice.

Resolution III.

Whereas Fresh Egg Laws of several northeastern states have proved of great benefit to egg producers, dealers, and consumers and have improved egg markets in those states,

And, whereas the enforcement of Fresh Egg Laws in the northeastern states has been accompanied by educational work among egg dealers and producers with a view toward increasing the sale of eggs qualifying as "fresh,"

And, whereas there is great need for improving the Baltimore Egg Market and other egg markets in Maryland,

Be It Resolved that the Maryland State Poultry Council request that the University of Maryland make the necessary provisions for the proper enforcement of the Maryland Fresh Egg Law, together with educational work among producers, dealers, and consumers with a view toward improving the quality of eggs sold to consumers and with a view toward stabilizing egg marketing conditions in Maryland,

And Further, Be It Resolved that a copy of this resolution be sent to the Governor of the State, the members of the State Legislature, the President of the University of Maryland, the Dean of the College of Agriculture, and the Director of the Experiment Station and the Maryland Farm Bureau.

Mrs. Hopkins moved, Mr. Peterson seconded, that the foregoing resolutions be adopted as a whole. Motion carried.

President Rieck discussed the work on the 1941 and 1942 Yearbooks of the Council as transacted by Ora Overholser upon authority of the Council. The books issued were quite creditable, but proceeds and expenses had been quite disappointing.

Mr. Peterson moved, Mrs. Sattler recommended that Mrs. W. W. Hopkins be considered for award of certificate of merit for outstanding service to the poultry industry and agriculture in general. Motion carried.

The Nominating Committee reported through A. R. Peterson, Chairman as follows:

H. H. RIECK, President
J. W. SNODDY, 1st Vice-President
W. A. SPEARIN, 2nd Vice-President
MRS. W. W. HOPKINS, Treasurer
W. H. RICE, Secretary

Director to NEPPCO—H. H. RIECK

Delegates to NEPPCO—J. W. SNODDY, A. D. COUDON, alternate
Cooperatives—CHAS. RITTER, W. W. WILHELM, alternate
Turkey Association—ARTHUR S. NELSON, MRS. A. W. SATTLER, alternate
Extension Service—DR. M. A. JULL, CHAS. S. WILLIAMS and W. H. RICE

Director to Farm Bureau—H. H. RIECK

Delegate to Farm Bureau—ROBERT C. STREET, A. R. PETERSON, alternate. Mrs Jost moved, Mrs. Sattler seconded, that ballot be closed. Motion carried.

Mrs. Sattler moved, Mr. Nelson seconded, that Secretary be instructed to cast a unanimous ballot for reelection of present officers. Motion carried, and Secretary cast ballot.

Meeting adjourned 4:30 P. M.

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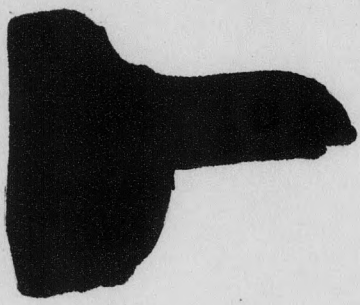

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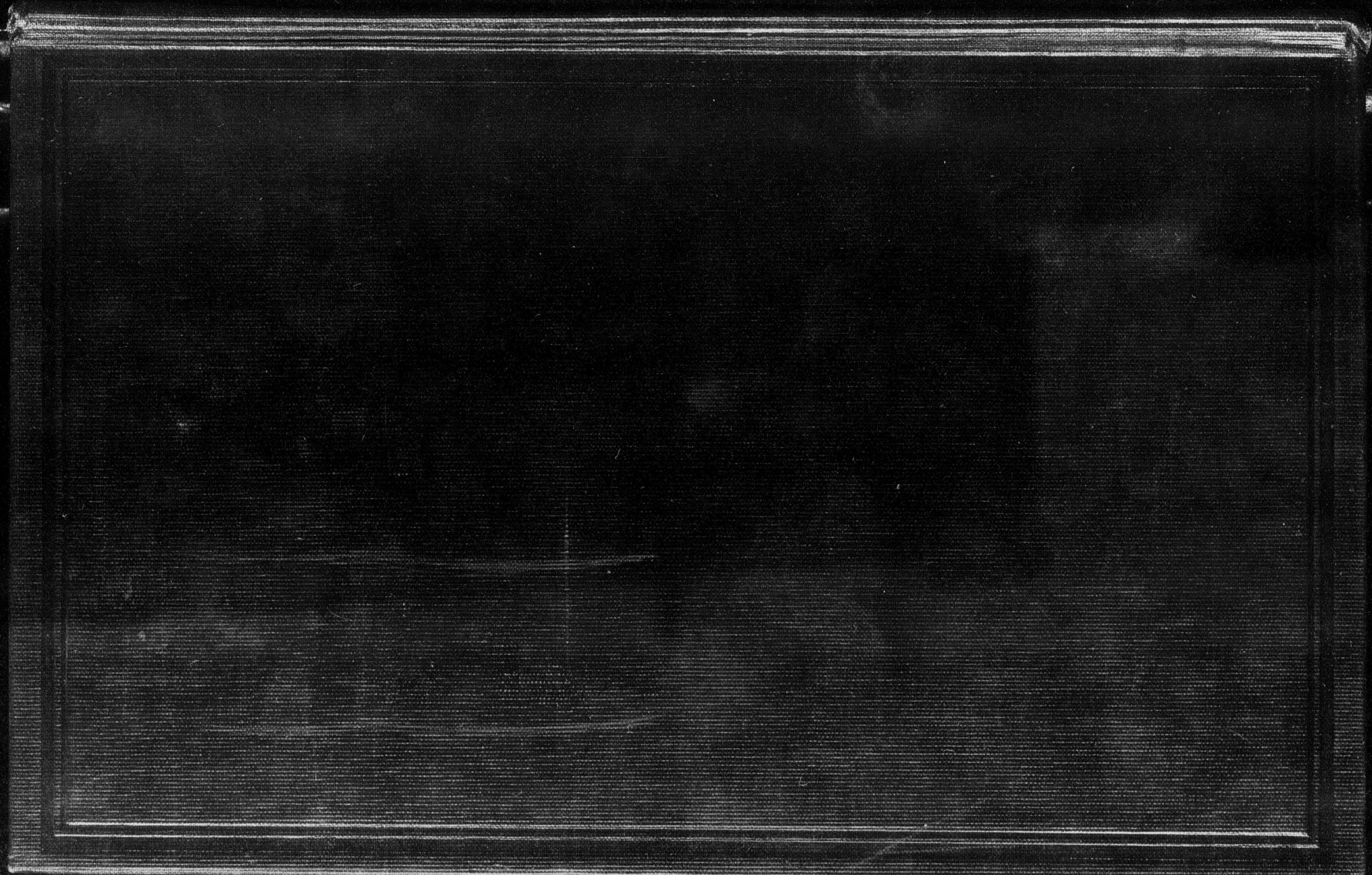
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